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PRUDENTIA ET ANIMIS

A

CONSPECTUS

OF

THE PHARMACOPŒIAS

OF

THE LONDON, EDINBURGH, AND DUBLIN

COLLEGES OF PHYSICIANS,

AND OF

The United States Pharmacopœia.

BEING

A PRACTICAL COMPENDIUM

OF

MATERIA MEDICA AND PHARMACY

BY ANTHONY TODD THOMSON, M D. F.L.S.
Fellow of the Royal College Physicians, Professor of Materia Medica and Therapeutics in Univ. Coll. London, &c. &c.

SEVENTH AMERICAN EDITION, MUCH ENLARGED AND IMPROVED

EDITED BY CHARLES A LEE, M.D.
PROF. OF GEN. PATHOLOGY AND MAT. MED. IN GENEVA MED. COLL

(*From the Thirteenth English Edition.*)

"The pictures drawn in our minds are laid in fading colors; and if not sometimes refreshed, vanish and disappear."—Locke.

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PREFACE

TO THE

THIRD AMERICAN EDITION

THE present Edition differs in no respect from the last, with the exception that it is still more full and complete. Some typographical errors have been corrected, and deficiencies supplied to the extent of about thirty pages of additional matter; so that no article, it is believed, (whose medical properties are known) is now omitted, which is of any consequence in medicine. The chief additions have been made to PART II., relating to TOXICOLOGY. It is now a complete manual on the subject, both as relates to treatment, and the analysis of poisonous agents. Free use has been made of Taylor's late work on "Medical Jurisprudence," and other standard authorities. The American Editor chooses to retain the original title, "THOMSON'S CONSPECTUS," although his additions have considerably exceeded the original work. The "Conspectus" is again commended to the favorable regards of the profession throughout the United States.

New York, Sept., 1844.

PREFACE

TO THE

FIFTH AMERICAN EDITION.

The patronage which this little work has received from the profession in the United States, makes it the duty of the American Editor to render each edition more perfect, if possible, than the last. He has accordingly made considerable additions to the present, amounting to above twenty pages, the value and importance of which he leaves to the judgment of the reader. As the work is now an acknowledged hand-book in all the medical colleges of the country, the Editor pledges himself to keep it fully up to the times, as a chemical, pharmaceutical, botanical, and therapeutical digest in these departments of science.

Geneva Medical College,
Nov. 25, 1848.

PREFACE

TO THE

FIRST ENGLISH EDITION.

The multifarious and extended pursuits, in which both the study and the practice of medicine engage its followers, require that the memory be often refreshed, and the attention directed to circumstances, which, although in themselves of sufficient importance, yet might easily be forgotten or neglected. Every student of medicine who wishes duly to qualify himself for the exercise of his profession, endeavors to become acquainted with Materia Medica and Pharmacy, without which he might justly be regarded as employing dangerous weapons against the human constitution, instead of holding in his hands the salutary means of correcting the aberrations from health, and removing the bad effects of the accidents to which it is liable. But however assiduously this part of medical science may be studied, and although y means of an intimate acquaintance with *Natural History*, Botany, and *Chemistry*, a correct knowledge of the nature and omposition of each of the substances used in the cure of diseases may be attained, yet it is impossible that all these can be ever present in the memory, or always rise in it, at the moment when hey ought to be prescribed. Hence many valuable medicines, which are successfully employed at one time, are forgotten at another; and, as there is a fashion in medicine as well as in other things, we find one generation extolling a remedy which is alto- neglected by the succeeding, or until some accident again it to favor. The principal use, therefore, of such a pro- as the present is to prevent this evil, by compressing into a small compass the most useful part of the information which is obtained from larger works, and, by affording a facility of re-examination, to keep in view remedies not constantly nor generally employed. To the young practitioner, and to him particularly, who has not had every advantage of education, it is more confidently offered; and the author hopes that to such it will not be unacceptable.

It is intended to afford a compendious view of the improved editions of the three British Pharmacopœias, pointing out the circumstances in which they agree together, and those which are peculiar to each of them. The work of the London College has been taken as the text-book, and the formulæ of the compound articles, consequently, are quoted from it only; for if those of each of the Pharmacopœias had been separately given, the character of the volume would have been altered; and, instead of being a pocket manual, it would have swollen to the size and form of a Dispensatory.

Under each article of the vegetable kingdom, the place it holds in the systems of *Linnæus* and *Jussieu* is stated, its original place of growth pointed out, and the term of its existence marked in the characters used by botanical writers. The chemical components of the different substances are taken from the Systems of Chemistry of the author's friends, *Dr. J. Murray* and *Dr. Thomas Thomson*, the papers of *Sir Humphrey Davy*, the *Annales de Chimie* and the valuable analyses of *Berzelius;* and the properties of most of the vegetable productions from the *Materia Medica a Regno Vegetabili of Bergius;* and from personal observation.

With regard to their medical properties and doses, the best writers have been consulted, and every assistance derived from the Practical Synopsis of *Dr. Pearson;* while any peculiar effects observed in the course of the author's own practice have been cautiously adopted. In marking the incompatible articles, those only are given which are likely to enter into extemporaneous prescriptions with the substance under which they stand; and it is to be wished that more attention were bestowed upon these by the majority of practitioners; for, undoubtedly, many of the confused and contradictory accounts which have been given of the effects of different remedies, have arisen from the injudicious combinations into which they have been made to enter, as well as the improper circumstances of the cases in which they have been prescribed.

To make up for the shortness of the descriptions in the body of the work, a more general and full account of each of the classes of substances employed is given in the Introduction; and to facilitate the art of prescription to the student, a few of the more common formulæ are introduced by way of example; besides a Table, graduating the doses of medicines to the ages of the patients.

As the work is an acknowledged compilation, very little of novelty can be expected in it, and the sole merit it can claim is that of correctness. As it is, he presents it to the public, whose decision must eventually stamp the value of every production, either of labor or of intellect; and, therefore, while he sets the rudder of his little bark, and commits it to the popular tide, he trusts that, if it be worthy of attention, and can prove useful, it will be wafted to a safe port but if not, it will quickly founder and be for ever forgotten.

INTRODUCTION

In the British Pharmacopœias, the articles of the Materia Medica which are simples, or are not prepared by the apothecary, are arranged in alphabetical order; but the chemical and pharmaceutical preparations are arranged in different classes, so that all the substances compounded in a similar mode, or possessing similar chemical properties, are brought together under the same title. We propose to give a general view of the peculiarities of each of those classes, by way of introduction to the particular notices of the individual articles contained in the Pharmacopœias; and as we have adopted the work of the London College as our textbook, we shall follow its method of arrangement.

ACIDS.

All the acids employed in pharmacy, with the exception of the hydrochloric and the hydrocyanic acids, are supposed to be compounds of *oxygen* with *one* or *more* combustible substances: the hydrochloric acid is a compound of *chlorine* and *hydrogen*: the hydrocyanic, of *hydrogen* and *cyanogen*. Acids are characterized by the following properties: They are sour to the taste; change to red the blue and purple vegetable colors; form neutral compounds with alkalies and earths, in which the properties of both the components are lost; and unite with the metallic oxides, constituting a peculiar class of salts. They unite also with water in any proportion.

The names of acids formed from the same base, generally vary in their terminations, according to the quantity of oxygen they are presumed to contain. Thus, when sulphur is united with its full portion of oxygen, the acid is named *sulphuric*; when with a smaller portion, *sulphurous*; the terminations *ic* and *ous* marking the degree of acidification. As chlorine is now acknowledged to be a simple substance, the London Pharmacopœia names its compounds *chlorides*. The term *chlorate* implies that the chloric acid is in combination with oxygen, and an oxide. Thus the chlorate of potassa is a compound of *chloric acid* and potassa.

The stronger acids should be kept in well-stopped glass bottles, and the name of the acid each bottle contains engraved on the glass. They should also be dispensed in glass-stopped phials, for cork blackens the sulphuric acid, and it is dissolved by the nitric and the hydrochloric acids.

Sulphuric acid is sometimes adulterated with sulphate of potassa; which may be detected by saturating the acid with ammonia, and exposing it in a crucible to a red heat, so as to expel the sulphate of ammonia;—the sulphate of potassa when present, will remain in the crucible.

Nitric acid, also, is sometimes adulterated with *sulphuric* and *hydrochloric* acids. These adulterations are discovered by dropping into the nitric acid diluted a solution of nitrate of baryta, which is precipitated white, if sulphuric acid be present; and with a solution of nitrate of silver, the precipitation of a chloride of silver shows the presence of hydrochloric acid. In the same manner *sulphuric acid* is detected in acetic acid, by dropping into it a solution of acetate of baryta; copper by the acid becoming bluish when supersaturated with ammonia; or the ferrocyanate of potassa throwing down a copper-colored precipitate, and lead, by a black precipitate being thrown down when sulphuretted hydrogen gas is added to it.

ALKALIES AND THEIR SALTS

Two of the mineral ALKALIES employed in pharmacy are compounds of *oxygen* with *metallic bases; ammonia* is a compound of *hydrogen* and *nitrogen*. They possess properties the reverse of the acids. Their taste is urinous and acrid· they change to green or blue, the vegetable red colors: they are caustic, or inflame and corrode the skin, and dissolve animal matter: they have a strong affinity for water, and by their greater solubility in it are distinguished from the earths; they unite with oils and fat, forming soap; and form neutral salts with the acids. There are three alkalies: one is volatile, and cannot be obtained perfectly pure in a solid form; the other two are fixed. They should be kept in well-stopped glass bottles, and dispensed in glass-stopped phials.

Ammonia, the volatile alkali, is often over-diluted with water, which may be known by the specific gravity of the fluid; or, a phial capable of containing 224 grains of distilled water should hold 216 grains of liquor ammoniæ. *Liquor potassæ* often contains lime, which is known by the solution, diluted with distilled water, becoming milky when the breath is blown through it, or on a solution of carbonate of potassa being added to it; the lime being thus formed into a carbonate. The purity of *potassa*, in the solid form, is of little consequence, as it is used for external application only: pure *soda* is not used in medicine.

The *Alkaloids*, or alkalies found in the barks, and the leaves, and the seeds of some plants, are compounds of carbon, oxygen, hydrogen, and nitrogen. They possess many of the chemical properties of the mineral alkalies.

ALKALINE SALTS should, when neutral, have neither alkaline nor acid properties; but some salts combine with two proportions of acid. When the acid is in excess, *bi* or *bin* is added to the appellation of the salt, as bicarbonate of potassa. They require for their solution various proportions of water, from one-half to 2000 times the weight of the salt. When they attract moisture they are said to be *deliquescent;* when they lose their water of crystallization, become opaque, dry, and easily fall to powder, *efflorescent;* if, when exposed to heat, they gradually dry to a mass, they are said to undergo the *watery fusion;* and to *decrepitate*, if they split, fly, and crackle, when exposed to a high temperature.

The salts most commonly adulterated are *carbonas potassæ* and *carbonas sodæ*. To try the first, make a solution of one part of the salt in eight of distilled water. If this become turbid after being neutralized with pure nitric acid, it indicates the presence of *silex;* if a white precipitate be thrown down in the neutralized solution by chloride of barium or acetate of lead, *sulphuric salts* are indicated; and *hydrochloric salts* by a white precipitate being formed with nitrate of silver. If a white precipitate be produced by a solution of oxalate of potassa, *lime*, or its *carbonates*, are present. The same tests show the presence of similar substances in *carbonate of soda*, if added to a saturated solution of it in nitric acid. The addition of *tartaric acid* dissolves *potassa*, by forming a precipitate of bitartrate of potassa.

The deliquescent and efflorescent salts should be kept and dispensed in stopped bottles; whilst those that are persistent will not suffer from being put up in paper.

EARTHS, AND THEIR SALTS.

The earths, like the alkalies, are mostly compounds of *oxygen* with *metallic bases*. They are of very difficult fusibility; very sparingly soluble; and unite with the acids, forming neutral salts. Those which are soluble in water possess properties very similar to those of the alkalies: they are caustic; change to green vegetable blues and reds; and combined with oils, form soap.

Two earths only in their pure state are used in medicine, namely, *lime* and *magnesia*. The former, which is chiefly employed in pharmaceutical operations, should be used as soon after it is burnt as possible; and earth should be preserved in very closely-stopped bottles, as both attract, powerfully, the carbonic acid contained in atmospheric air. The solution of lime or lime-water should be kept in small bottles perfectly full and well corked; for, by the contact of air, the lime attracts carbonic acid, loses its solubility, and forms a pellicle of carbonate of lime on the surface of the water, till the whole of the lime is abstracted.

The NEUTRAL EARTHY SALTS do not require any particular care or management, except that they ought not to enter into extemporaneous prescriptions with substances which are likely to decompose them; or with those acids with which they form insoluble compounds; as, for example, chalk with sulphuric acid.

METALS, AND THEIR SALTS.

METALS, which are supposed to be simple substances, have, with a few exceptions, a greater specific gravity than any other class of bodies; they are dense, opaque, susceptible of a fine polish, tenacious; and are the best conductors of heat. They are more or less fusible, and may be volatilized by heat. In their metallic state they have affinities for each other, and also for oxygen, hydrogen, carbon, sulphur, phosphorus, chlorine, iodine, and bromine; and when united with oxygen, form acids, alkalies, and the earths.

None of the metals, except *tin*, are employed in the metallic form as remedies in the practice of medicine; but for pharmaceutical purposes it is of importance to obtain them in as pure a state as possible. Metals, united with simple substances, form compounds, which are named from the base; for example, *chlorides*, *sulphurets*, *phosphurets*, *iodides*, *bromides*, *oxides*.

METALLIC SALTS are either simple combinations of the metals with oxygen, or combinations of their oxides with acids.

Metals combine with various portions of oxygen, which are denoted and expressed by the color of the oxides, as *grey oxide of mercury*, *red oxide of mercury*, *&c.* Oxides have not the lustre, opacity, tenacity, nor gravity of the metals; they are un-inflammable, generally insipid, nearly insoluble in water, and have an earthy appearance. They require to be kept in stopped bottles, as some of them are reduced by hydrogen, which is more or less constantly floating in the atmosphere.

The *metallic salts*, which, properly speaking, are oxides combined with the acids, are of a saline nature, generally soluble in water, and crystallizable. They are named from the acid, and the metal with the oxide of which it is combined, as *sulphate of iron*, *nitrate of silver*, &c., meaning *sulphate of the oxide of iron*, *&c.* The active properties of metallic salts vary much, according to the degree of previous oxidizement of the metals they contain; thus, the same acid, united with an imperfect oxide, will form an insipid, insoluble compound, while, with a more perfect oxide, the compound will be acrid, and soluble in water.

Many of the metallic salts effloresce, and attract oxygen from the atmosphere; others are altered in their properties by moisture, and some of them are decomposed by the action of light; hence, perhaps, it ought to be a general rule to keep all of them in well stopped bottles made of green glass, or otherwise rendered opaque. In forming those which are soluble into lotions, *distilled* water should be used; and in mixtures, attention should be paid not to unite them with incompatible substances.

PREPARATIONS OF SULPHUR.

The combinations of sulphur with the alkalies and the earths are named *sulphurets*, and require to be carefully preserved from the atmosphere, as they attract moisture from it, deliquesce, and are decomposed. When they are prepared with water, the oxygen of the water acidifies part of the sulphur, and forms sulphates; while one part of the hydrogen, uniting with a portion of the sulphur, volatilizes it in the form of sulphuretted hydrogen gas, and another assists in producing hydroguretted sulphurets of the alkaline base. One test of the goodness of concrete sulphurets is their want of odor; for whenever the fetid gas is evident, decomposition has already commenced.

PREPARATIONS OF IODINE, BROMINE, AND CHLORINE.

All these substances combine with metals, forming *iodides*, *bromides*, and *chlorides*. When the compound consists of one equivalent of each of the components, the addition of *prot* or *proto* is used, as *protiodide*, *protochloride*, *&c.*; when it contains two equivalents of the base, the syllable *bin* or *bi* is added; thus, *biniodide*, *bichloride*.

VEGETABLES.

As the collection of vegetable substances cannot be attended to by the medical practitioner, the directions, usually given relative to the mode and time of gathering plants, are of less importance than a knowledge of their botanical characters, and their proper appearance when well and recently dried; for many inert plants are often introduced by the collectors among those which possess the most active and useful properties. They are generally tied in bundles, and hung up in the air, without any regard to the action of light, which often very materially affects both the color and the efficacy of the vegetable; but it would be better to pick the flowers and leaves from the stems, when these are useless, and cut roots into small pieces after they are well dried; and preserve them in closely-covered tin canisters or oil jars, lined with paper. Some things, as, for instance, the squill bulb, and the colchicum cormus, should always be dried by the apothecary. Both should be cut transversely, the lamina of the bulb separated and dried by a heat under 212° Fahr., after which the pieces ought to be friable, and have as bitter and as acrid a taste as the moist bulb. The cormus should be dried in transverse slices.

VEGETABLE ALKALIES.

The vegetable alkaline bodies, which have as yet been discovered, are about fifty in number; and nearly all plants remarkable for medicinal or poisonous properties, when subjected to a chemical examination, have been found to contain an alkaline principle. Nearly all the vegetable alkalies are precipitated by tannin, or infusion of nutgalls, but not by gallic acid: and these precipitates, which are usually white powders, are bitannates of the alkali, insoluble in cold water, and easily decomposed by an alkaline or earthy base. The following process of Mr. Henry, is one of the best for obtaining these alkalies in a separate state:—" Digest the plant to be examined, in warm water, acidulated with sulphuric acid Draw off the clear liquid, neutralize it by potash, and add a concentrated infusion of nutgalls as long as a precipitate falls. Separate the precipitate, wash it in cold water, and mix it intimately with a slight excess of slackened lime. Dry the mixture over the vapor bath, till it is reduced to powder. " Digest this powder in alcohol or æther. Filter, distil off the alcohol or æther. Set the residue aside for some days. The alkali will be deposited in crystals."—*Jour. de Pharmacie*, 21, 218.

About thirty of the vegetable alkalies have been analyzed, and are found to be compounds of *carbon*, *hydrogen*, *azote*, and *oxygen*. Substances ending in *in*, as *meconin*, are not alkalies, but neutral bodies.

GUM RESINS.

These are natural combinations of gum and resin: the former predominating in some, the latter in others. They have generally a strong odor, owing to volatile oil, and a pungent, bitter taste; they are solid, brittle, opaque, almost all entirely soluble in diluted alcohol, and form emulsions when triturated with water: but by standing, the resin is deposited, and, therefore, fluid preparations of gum resins should always be extemporaneous. They soften by a gentle heat; but in a high temperature are decomposed.

The gum resins, particularly *opium*, should be well freed from extraneous matters; and when it is wished to retain them in a soft state for making pills, they must be kept in the mass, wrapped in a bladder, in a well-covered opaque jar; but when they are to be powdered, they should be cut in small pieces, and laid in an open drawer, or exposed to the air.

EXPRESSED OILS.

These oils are compounds of oxygen, hydrogen, and carbon They are prepared by nature in the seeds and fruit of some vegetables, from which they are expressed, and hence their appellation; but the title *fixed oils* is preferable, as it implies their character, and as some of the volatile oils also are obtained by expression.

Those which are expressed without heat are to be preferred, as by heat they are apt to acquire acrimony and an empyreumatic odor. The greater number of them, when pure, are liquid in a moderate temperature, unctuous, perfectly transparent, colorless, or having a pale-yellow or greenish tinge; inodorous; lighter than water, and not miscible with it: they unite with alkalies and form soap; and with oxide of lead and form plasters. Almond and olive oil should be insipid; linseed and castor oils have some taste, but they should not feel hot nor acrid in the throat. Palm oil is a soft solid, or butter.

The rancidity of oils probably depends on the absorption of oxygen, on which account they should be kept in bulk as much as possible, and in narrow-necked bottles; so that a very small surface only will be exposed to the air.

DISTILLED OILS.

For similar reasons to those stated above, regarding expressed oils, we prefer the title of *volatile oils* for these preparations. They are mostly compounds of oxygen, hydrogen, and carbon, and in some instances also of nitrogen; and are produced by nature in various parts of the vegetable system; either in the flowers, the fruit, the leaves, the bark, the wood, and sometimes in all of these parts. The majority of them are obtained by distillation, but some of them by expression. They possess the unctuosity, inflammability, and viscidity of the fixed oils; but they are in general colored, odoriferous, pungent, and acrid. The majority are lighter than water, but some of them are heavier, and some congeal at a moderate temperature. They are dissolved in small quantity, in *distilled water*, by simple agitation. Almost all of them are soluble in alcohol, and miscible with fixed oils, and with each other; hence they are often adulterated with alcohol, or with oil of cloves or of almonds, or with oil of turpentine, which is the cheapest of the volatile oils. The first is discovered by an increase of temperature and a milky appearance, when the oil is mixed with water; the second, by a greasy stain being left on paper on which the oil is dropped and exposed to a considerable heat, and by not being soluble in alcohol; and the third, by its odor, when the suspected oil is dropped on paper and heated, or sometimes even when rubbed between the fingers.

The odor and taste are the usual tests of their goodness; and to preserve them, they should be kept in a cool place, in small bottles, quite full, and well corked.

DISTILLED WATERS.

In the distillation of volatile oils, the water, which comes over during the process, contains dissolved in it a portion of the oil, and forms this class of preparations. They should, therefore, have the odor and taste, in a slight degree, of the oil; be free from empyreuma; and if again rectified, which enables them to be kept for two or three years, they should appear nearly as transparent as pure water. They are seldom prepared by the apothecary, but generally in the large way, and often very carelessly. When they appear ropy and thick, or have a fetid odor, they are unfit for medicinal use. To prevent their spoiling, a small portion of spirit is often added; but the second rectification is a preferable method of preserving them.

Common distilled water is seldom used by the apothecary owing to the trouble of preparing it. But this may be remedied by procuring the simple apparatus invented by Dr. Lamb, or by getting a pewter tube fitted to the spout of a common tea-kettle, which may be kept cool, when in use, by being wrapped round with wet rags. Neither boiled nor filtered water will answer the purpose for which distilled water should be used.

INFUSIONS.

Water at 212° extracts the gum, sugar, extractive, tannic acid, saline matters, and a portion of the volatile oil and of the resinous matter of vegetables; thence infusion, perhaps, is equivalent in the majority of cases to decoction. Cold water also extracts many of the active principles of plants. The infusion made with boiling water, although, perhaps, less grateful, yet contains more active matter. In either case, infusions should be extemporaneous preparations, and therefore the London College properly directs half a pint only to be made at once. The substances infused should be coarsely powdered only, for when the powder is fine, the infusion never can be rendered perfectly clear.

MUCILAGES.

These, which are simple solutions of gum in water, are of a thick consistence and adhesive. They should be strained through a coarse cloth, in order to separate the extraneous matters which have adhered to the gum. When thick, they may be kept for a considerable time without undergoing any change. In a chemical point of view, the *solutions of starch* and of *tragacanth* are improperly styled mucilages.

DECOCTIONS.

These are aqueous solutions of the active principles of vegetables obtained by boiling. The directions of the Pharmacopœias, particularly as to the time of boiling, should be strictly attended to; for, although the solvent power of the water is increased by boiling, yet the notion that long coction renders the preparation more active is erroneous. Vegetables containing volatile principles and extractive matter cannot, with strict propriety, be subjected to decoction, as the first are dissipated by the boiling, and the second attract oxygen with so much avidity at a temperature of 212°, that it is converted into an *insipid inert matter*, which is no longer soluble, and is precipitated in the decoction. This is the case with *cinchona*, *senna*, and some other vegetable matters, which are still, nevertheless, ordered to be prepared by decoction. When they are so prepared, the vessels should be very closely closed. Vegetables also, which contain tannic acid and starch, should not be made into decoctions, because a tannate of fecula is formed which is insoluble in cold water, and is inert.

Decoctions should not be kept longer than twenty-four hours, in warm weather, as they very soon ferment, become ropy, and spoil.

EXTRACTS.

These are prepared by evaporating vegetable solutions till a tenacious mass is obtained. An extract prepared from an infusion or decoction is termed a *watery extract;* from a tincture, a *spirituous extract.* Both kinds of extracts should contain all the principles of the vegetable soluble in the menstrua with which they are prepared; but the volatile matters are dissipated, and some of the fixed parts are decomposed, the proper extractive is oxygenized, and the virtues of the vegetable substance consequently are often altered or destroyed. This class of preparations, as usually formed, might be altogether rejected; but when they are made from the expressed juice of the recent vegetable, inspissated at a very low heat, they form a most valuable class of remedies. Extracts are ordered to be kept in a *hard* and in a *soft* state· the consistence of the soft being such as to retain the round form of a pill without the addition of any powder. Both varieties should be preserved in a dry place, to prevent them from becoming mouldy; and the soft should be wrapped in oil bladders and kept in closely covered pots.* The softer extracts should be sprinkled with a small quantity of alcohol.

MIXTURES.

These are chiefly simple suspensions of insoluble substances in fluids, by means of mucilages. They should always be extemporaneous preparations; and the only attention required in ordering them is not to bring together incompatible substances. These are pointed out in their places in the body of this work

SPIRITS.

This title comprehends spirituous solutions, prepared by simple mixture, by maceration, and by distillation. They are uniform, transparent, unchanging solutions. In those which are distilled, proof or diluted spirit is employed, as pure alcohol is more volatile than the essential oils, which are the parts of the plants held dissolved in these spirits. They should be perfectly free from impurities and empyreuma, and have the odor and taste of the volatile oils of the substances from which they are distilled.

TINCTURES.

Tinctures are spirituous solutions of vegetable, animal, and some saline substances. They are made either with pure alcohol or with proof spirit. The first kind are precipitated by the addition of water, and therefore are more seldom employed; but the latter are very common additions to infusions and decoctions. They ought not to be united with any vehicle that can decompose the tincture, "or separate anything from it in a palpable form."

Tinctures should always be prepared by the apothecary, as the adulterations of them, which are daily practised by the druggist, are not easily detected. The ingredients should be reduced to a coarse powder, and the maceration made in close vessels, exposed to a heat of 80°, and frequently shaken. When completely made, they should not be put away upon the ingredients, but filtered through bibulous paper, and kept for use in close bottles; for although they are not liable to spoil, yet, by the evaporation of the menstruum, their strength is altered, which, if they contain opium, or other active matters, may be productive of bad effects. Parmentier† proposes that one-half of the spirituous menstruum be added to the vegetable ingredients at first, and after digesting six days, this part be poured off, and the remainder added. In six days more the whole is to be strongly expressed, and the two tinctures mixed together. By this method he imagines more of the active principles of the vegetables are extracted, and the tinctures obtained of a more uniform strength. The best method, however, of making tinctures, is to mix the vegetable substance in powder with clean siliceous sand, and, having put the mixture in an oblong funnel or percolator, to pour the spirit over it. By this method a strong tincture is procured in as many hours as days are required by the present method of preparation. The Edinburgh College has adopted the percolator.

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* For a great improvement in making Extracts, see *London Medical Repository*, vol. iv., p. 184. A patent, also, has been taken out by Mr. Barry, for preparing them by evaporation *in vacuo*.—See *Quarterly Journal of Science*, vol. viii., p. 360. See also several papers in the *Pharmaceutical Trans.*, 1841, by Mr Squires, Mr. Morson, and others.

† Annales de Chimie, vol. lxii., p. 40.

DISPLACEMENT

Is a species of *filtration*, lately introduced into pharmacy, and employed in the preparation of some of the vinegars, extracts, infusions, and tinctures. It affords many advantages, both in an economical point of view and in the character of the resulting preparations. This process is recommended by the New U. S. Pharmacopœia, and is usually conducted as follows:—A hollow cylindrical instrument is to be used, somewhat conical towards the inferior extremity, having a funnel-shaped termination, so as to admit of its being inserted into the mouth of a bottle, and provided internally, near the lower end, with a transverse partition, or diaphragm, pierced with numerous minute holes; or, in the absence of such a partition, obstructed with some insoluble and inert substance, in such a manner that a liquid poured into the cylinder may percolate slowly. The substance to be acted upon, having been reduced to a coarse powder, and mixed with enough of the menstruum to moisten it thoroughly, is, after a maceration of some hours, to be introduced into the instrument, and slightly compressed upon the diaphragm. Any portion of the macerating liquid which may not have been absorbed by the powder, is afterwards to be poured upon the mass in the instrument, and allowed to percolate. Sufficient of the menstruum is then to be gradually added to drive before it, or displace the liquid contained in the mass: the portion introduced is in like manner to be displaced by another portion; and so on till the required quantity of filtered liquor is obtained. If the liquor which first passes should be turbid, it is to be again introduced into the instrument. Care must be taken that the powder be not, on the one hand, too coarse, or loosely pressed, lest it should allow the liquid to pass too quickly; nor, on the other, too fine or compact, lest it should offer an unnecessary resistance. Should the liquor flow too rapidly, it is to be returned to the instrument, which is then to be closed beneath for a time, in order that the finer parts of the powder may subside, and thus cause a slower percolation.—*U. S. Phar., ed.* 1842.

TROCHES OR LOZENGES.

These are small, dry, solid masses, generally of a flattened oval shape, consisting of powders incorporated with sugar and mucilage. They are designed for holding in the mouth while being dissolved, and, of course, should not contain those medicines which require to be given in large quantity, or which are disagreeable to the taste. Gum tragacanth being preferable to any of the other gums a mucilage is first to be prepared with this with cold water, and then strained. With this, the powders, including sugar, are thoroughly mixed, by rubbing upon a marble slab, and are thus formed into a paste, which is spread out by means of a roller, upon the surface of the marble, previously powdered over by a mixture of sugar and starch. The thickness of the extended mass is rendered uniform by a frame upon which the ends of the roller are placed. The upper surface is now covered with a thin layer of sugar and starch, and the mass is divided into small cakes of a particular shape, by means of a punch. These cakes are placed upon paper, and having been exposed to the air for twelve hours, are carried into a drying room moderately heated. When perfectly dry, they are thrown upon a sieve to separate the sugar and starch, and are then enclosed in bottles. The following formula may serve as a guide. (℞ *Citric Acid* in powder ʒj., *Refined Sugar* ℥viij., *Oil of Lemons* ♏xij., *Muc G Tragacanth* q. s. Form into lozenges of twelve grains each.)

ÆTHERS.

Æthers are compounds produced from a new arrangement of the elements of alcohol, by the agency of the acids, at a heat of 160°. They are extremely light and volatile; have a peculiar strong odor and taste; and, when pure, boil at a temperature under 100°. They require to be kept in very closely-stopped bottles, and in a cool place. In composition, æthers should not be added to mixtures until they are put into the phials, and ready to be corked; and directions should be given that any æthereal mixture be taken immediately after it is poured from the phial

WINES.

Wine is a tolerably good menstruum for many vegetable principles; but it is liable to the objection of inequality of strength and medicated wines are more liable to suffer decomposition from keeping than tinctures. Parmentier* proposes that, instead of preparing medicated wines as they have been usually prepared, the alcoholic tinctures should be added to wine in given quantities; by which means, he contends, the preparations are less nauseous, and always of the same determinate strength. They should be kept in well corked bottles, in a cool place

VINEGARS.

Vinegar, or diluted acetic acid, is found to be the best solvent for squill, colchicum, and some aromatic vegetable bodies; but its use cannot be extended, for it alters the powers of some vegetable principles, and does not accord with others in virtue.

Vinegars should be preserved in closely-stopped glass bottles, and made in small quantities only at a time, as they are apt to spoil, notwithstanding an addition of spirit which is ordered.

PREPARATIONS OF HONEY.

Honey was formerly considered as a medicine of some efficacy, particularly in pectoral affections; but more correct views of these diseases have deservedly thrown it into neglect. It acts on the bowels, but in other respects possesses no advantages over syrup; therefore its preparations have been rejected from the Edinburgh Pharmacopœia, although they are still continued in those of the London and Dublin Colleges, and the U. S. Pharmacopœia.

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* Annales de Chimie, vol. lii., p. 46.

They are not apt to spoil, and thence require less attention to preserve them than syrups.

SYRUPS.

These are saturated solutions of sugar in water, either simple or united with some vegetable principle, with the view to color, flavor, or medical virtue; but for the last intention this is perhaps the worst of all forms for obtaining the medicinal powers of substances; and syrups are used chiefly to render the more active preparations palatable. Upon the whole, however, they do not even answer this intention well, few persons thinking that sweetness renders a nauseous drug more palatable; and they might therefore, be easily dispensed with.

As they quickly ferment, and spoil, if kept in a temperature above 60°, a small quantity only should be retained in the shop for immediate use; and the stock kept in a good cellar, in a temperature not exceeding 55°. They should never be used after they have begun to ferment; they should have a spec. grav. 1.261 when boiling, and 1.319 at ordinary temperatures.

CONFECTIONS.

Under this title the London College comprehends the *conserves* and *electuaries* of the Edinburgh and Dublin Pharmacopœias They consist of vegetable matters, beaten, when recent, into a uniform pulpy mass, with sugar; and of vegetable and light earthy powders mixed with syrup and honey. They form a class of preparations of no great activity, when compared with the other forms in which the same remedies may be given; but some vegetable matters can be thus preserved better than by drying; and they are useful as vehicles, and for giving form to more active medicines. They should be kept in closely-covered jars, to preserve their proper consistence and moisture.

POWDERS.

This class is the simplest, and perhaps may be thought the least objectionable form of exhibiting medicines; but, nevertheless, this mode of preparation is hurtful to many remedies. Some substances cannot be reduced to powder, unless very much dried, and the heat necessary to effect this alters their properties; even the impalpable form given to powders is hurtful to some resinous substances; and if we reflect that many of these, when kept in the mass, have their surface altered by the action of the atmosphere, we shall not wonder that a great alteration should be effected in a short time, by so great an extension of surface as takes place in the formation of a fine powder: this is particularly the case with *cinchona*, *rhubarb*, and *guaiacum*. It would, perhaps, be a good general rule to keep all powders in opaque or green-glass bottles; for, besides those which are generally known to be hurt by the action of the light, almost every powder is in some degree affected by it: thence the labelled sides of clear bottles, containing powders, which are always turned to the light, become, as it were, incrusted with the powder changed in its color, while the other side remains clean.

PILLS.

These are masses of a proper consistence for forming into pills, and are preserved in this state, by being kept in covered pots, wrapped in bladders, and occasionally moistened. A pill should not exceed gr. v. in weight.

PREPARATION OF ANIMAL MATTERS.

The substances of this class are seldom prepared by the apothecary, and require little of his attention for their preservation

PLASTERS.

A chemical union takes place between the semi-vitreous oxide of lead and oil: and a solid, hard compound is formed, tenacious in a moderate degree of heat. This forms the base of the majority of the plasters, but some of them owe their consistence to wax and resin.* They should not adhere to the hand when cold, should be easily spread when heated, and remain tenacious and pliant after they are spread. Those that contain metallic oxides ought to be melted by the heat of boiling water, for in a greater degree of heat the fatty matter is apt to reduce the oxide. All plasters become too consistent by age; when this is the case, they may be re-melted by a gentle heat, and some oil added to them. They are spread either on linen, silk, or leather.

CERATES, OINTMENTS, LINIMENTS.

These are preparations nearly resembling each other, but of a different degree of consistence. The first owe their greater firmness to wax, from which they are named, and exceed in consistence the ointments, which should have that of butter, while the liniments are scarcely thicker than common oil. The most important circumstance in these preparations is, the freshness of the fat and oils employed, and their preservation in this state. The mercurial ointment, however, forms an exception to this rule, as a slight degree of rancidity of the lard facilitates the oxidizement of the mercury, and the formation of the ointment; and old mercurial ointment is always more to be depended upon than that which has been recently prepared.

CATAPLASMS.

These are extemporaneous preparations, and have a place in the Pharmacopœias merely to fix the proportions of the ingredients.

N. B.—When the spec. grav. of a substance is mentioned, its temperature is supposed to be at 60°. By *gentle heat* is meant a temperature between 90° and 100°.

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* Deyeux, Annales de Chimie, vol. xxxiii., page 52, proposes to confine the name plasters to the combinations of the oxides and oils or fat; and to give to those not containing oxides the term *solid ointments*.

TABLE

OF NAMES, SYMBOLS, AND EQUIVALENTS OF THE ELEMENTS (OF WHICH ENTER INTO THE COMPOSITION OF THE ARTICLES OF THE MATERIA MEDICA.

Group I.

	Sym.	*Eq.*
Oxygen,	O	8
Sulphur,	S	16.12

Group II.

Chlorine,	Cl.	35.47
Bromine,	Br.	78.39
Iodine,	I.	126.57
Cyanogen,*	Cy.—C^2 N	

Group III.

Nitrogen,	N.	14.19
Phosphorus,	P.	31.44
Arsenic,	As.	75.34
Antimony,	Sb.	129.24

Sub group.

Aluminum,	Al.	13.72

Elements not Grouped.

Carbon,	C.	6.13
Boron,	B.	10.91
Mercury,	Hg.	101.43

Group IV.

	Sym.	*Eq.*
Silver,	Aq.	108.30
Sodium,	Na.	23.31
Potassium,	K.	39.26
Ammonium,*	N. H^4	

Group V.

Hydrogen,	H.	1
Copper,	Cu.	31.71
Zinc,	Zn.	32.31
Magnesium,	Mg.	12.69
Iron,	Fe.	27.18
Manganese,	Mn.	27.72
Bismuth,	Bi.	71.07
Calcium,	Cal.	20.52

Group VI.

Lead,	Pb.	103.73
Barium,	Ba.	68.66

TABLE OF SYMBOLS OF THE PRINCIPAL TESTS FOR POISONS.

Water,	Aq.
Distilled Water,	Aq. Dest.
Sulphuric Acid,	S′ or Sul′.
Carbonic "	C′ or Carb′.
Phosphoric "	P′ or Phosp′.
Oxalic "	O′ or Ox′.
Acetic "	A′ or Acet′.
Nitric "	N′ or Nitr′.
Muriatic "	M′ or Mur′.
Tartaric "	T′ or Tart′.
Citric "	Cit′.
Potassa,	P. or Pot.

Soda,	So.
Chloride of Barium,	Cl. Ba.
Nitrate of Silver,	Nitr. Arg.
Sulphuretted Hydrogen,	Sulph. Hydr.
Ammonia,	Am.
Cyanogen,	Cyan.
Hydrocyanic Acid,	Hydrocy′.
Ferrocyanide of Potassium,	Ferrocy. Pot.

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* Introduced, because, in combination, they play the part of elements.

The above symbols not only indicate their respective elementary substances, but when alone always stand for 1 eq. of that element. To indicate more than 1 eq., numerals are added to the symbols, as 2C, 3C, or O^2, O^3, O_4, &c. As these elements combine together and form compounds, always constant in nature, the composition of these is indicated by the juxta-position of symbols, or by placing the + sign between them, as HO, or H+O, indicating 1 eq. of hydrogen, combined with 1 eq. of oxygen, as in water. Numerals are added if more than 1 eq. be present, as C2O, or CO^2, indicating that 1 eq. of carbon, is combined with 2 of oxygen, as in carbonic acid. Each compound has its own eq. number, which is made up of the sum of those of its components. Thus HO=1+8=9, or the sum of the eq numbers of hydrogen and oxygen. So CO^2=22, because 1 eq. of carbon, 6, is added to 2 eq. of oxygen. 8×2=16. Here it may be seen that the eq. number of oxygen is the same in both cases, as it is indeed in all others, showing that these elements always combine together in the same relative proportions. This is the case also with the compounds, of which the eq. number is always the same, and they are subject to the same law of definite proportions as the elements. Their composition is expressed in the same way. Thus, $HO+SO^3$, or HO, SO^3, means, in either case, 1 eq. of water combined with 1 eq. of sulphuric acid (a compound formed of 3 eq. of oxygen with 1 of sulphur) having as its eq. no. 9+(8×3+16)=49. When a large figure is printed before a symbol, it multiplies every symbol to the next comma, or to the next + sign, or all placed within parentheses. When the equivalent properties of a compound are unknown, or when it is wished to state the percentage of the components of a known body, the following method is adopted, thus:—

Wax is stated to be composed of—magnesia (carb.).

Carbon,	81.874	Magnesia,	41.6
Hydrogen,	12.672	Carbonic Acid,	36.0
Oxygen	5.454	Water,	22.4
	100		100

Besides combining in equivalent weights, substances have, when in a gaseous state, a certain relation to each other, and combine in certain proportions, that is, one measure, or volume, with one or more volumes of another gas. The uniting measure of the compound gas is either equal to the sums of the volumes of its components, or, in consequence of chemical union, it is condensed into a smaller compass, which, however, bears to the former a certain ratio. By taking advantage of the tendency of bodies to combine, and of the power of others to decompose them, are obtained the different chemical preparations of pharmacy.

METHOD OF ORGANIC ANALYSIS.

Mix the substance to be analyzed with black oxide of copper, and heat in a tube; absorb the water which is formed, by dry chloride of calcium, and the carbonic acid by means of a solution of potassa, and collect nitrogen gas, if any, over mercury. We can then, by subtracting the weight of the carbon, hydrogen and nitrogen, from the weight of the substance, determine the amount of oxygen. The amount of nitrogen can otherwise be determined, by adding a strong base, as potassa, to the substance to be analyzed, and collecting the ammonia evolved. The explanation of these modes of analysis, is this: organic bodies, in presence of oxide of copper (a compound readily parting with its oxygen at a red heat, are resolved into carbonic acid, water, and nitrogen; any oxygen required to convert the carbon into carbonic acid, and the hydrogen into water, being derived from the oxide of copper. Again, organic substances containing nitrogen, when heated with a caustic alkali, evolve the nitrogen they contain in the form of ammonia, which can be collected by means of chloride of platinum, which forms an insoluble double salt with it—(Pt. Cl.$+$N H^4 Cl.) Two or more organic bodies may possess in 100 parts the same amount of their component elements, and yet be distinct compounds. They are thus termed *isomeric*, as the oil of turpentine and oil of lemons, each containing in 100 parts, 84.46 of carbon, and 11.54 of hydrogen.

ORGANIC VEGETABLE PRINCIPLES.

1. Compounds which contain oxygen and hydrogen in the same proportion as in water; sometimes called neutral compounds, or hydrates of carbon.	Starch, dextrine, cane sugar, grape sugar, gum, cellulose.
2. Neutral azotized substances generally diffused through plants.	Fibrine insoluble, and caseine soluble in cold water, albumen coagulated by heat, gluten, a glutinous and elastic compound of fibrine and an azotized principle.
3. Inflammable compounds, or hydrurets, or those in which hydrogen is in excess.	Ligneous tissue, fixed oils, stearine, margarine, elaine, volatile oils, camphor, balsams, oleo-resins, resins, wax, gum-resins.
4. Vegetable alkalies, composed of carbon, oxygen, hydrogen, nitrogen.	Morphia, narcotina, codeia, quina, cinchonia, strychnia, aconitina, veratria, &c.
5. Vegetable acids—oxygen in excess, or in greater proportion than in water.	Citric, tartaric, pectic, malic, acetic, tannic, gallic, oxalic, meconic, &c. (Hydrocyanic acid is a compound of hydrogen and the radical cyanogen.)

Vegetable principles may be divided into two classes,

1. Those common to all vegetable bodies.	Fibrin, albumen, casein, &c.
2. Those peculiar to certain orders or genera of plants.	1. Vegetable alkaloids. 2. Vegetable neutral principles. 3. Vegetable acids.

Of those principles which are common to all vegetable bodies some contain *nitrogen*. These are fibrin, albumen, and legumin, or casein, which are identical with the substances bearing the same names, and derived from animal bodies. Others contain no nitrogen. Some of these have the peculiarity of having their oxygen and hydrogen in the proportions to form water, and are called *amylaceous;* in others the hydrogen is in much greater proportion to the oxygen than in water, as in the fatty bodies. This class (containing no nitrogen) embraces lignin, starch, sugars (cane, and grape, mannite), gum, (mucilage, bassorine,) pectin, or pectic acid, extractive matters, fatty bodies, (oleine, glycerine, stearine, margarine, wax, spermaceti, &c.)

The principles peculiar to certain orders or genera of plants may be ranged under three classes—viz., 1st. *Those which possess alkaline* or *basic properties, called alkaloids.* 2nd. *Those neutral in their properties.* 3rd. *Those which possess the properties of acids.* The most important vegetable alkaloids are morphia, quinia, cinchonia, strychnia, brucia, solania, hyoscyamia, atropia, conia, nicotina, daturia, aconitina, delphinia, veratria, colchicia, &c.

The alkaloids are the most active class of vegetable principles. They all contain nitrogen, and hence, when heated, give off ammonia, (N. H^{3},) from their nitrogen uniting with a portion of the hydrogen. When in solution, they restore the color of reddened litmus, and possess an intensely bitter taste. Like ammonia, also, they form insoluble double salts with the chloride of platinum. Most of the alkaloids are solid and fixed; some, however, as those from hemlock and tobacco, are liquid and volatile. Most, when pure, are crystallizable. They are usually soluble in alcohol and ether, but very sparingly so in water. Their salts, however, are more soluble in that medium, except those with *tannic acid;* and hence solutions of the alkaloids are participated by infusions of nutgalls, or other substances containing tannic acid. In the plant, they exist in the form of salts, united to the order which contains them. All the alkaloids possess, in a greater or less degree, medicinal or poisonous qualities, which have a close connection with the botanical structure of the plants from which they are derived. Thus *atropia*, from the deadly nightshade, and *hyoscyamia*, from the henbane, both belonging to the order Solanaceæ, act very similarly on the animal economy, the difference being rather in degree than in character. The same relation exists between *quina* and *cinchonia*, from the different species of *cinchona* bark; while between quina and atropia, from different orders, there is a marked difference. The following is the chemical composition of some of the alkaloids:

Morphia	$C^{35} H^{20} O^{6} N$	Solania	$C^{84} H^{68} O^{28} N$
Codeia	$C^{35} H^{20} O^{5} N$	Atropia	$C^{34} H^{23} O^{6} N$
Cinchonia	$C^{20} H^{12} O N$	Nicotina	$C^{10} H^{8}$ — N
Quina	$C^{20} H^{12} O^{2} N$	Conia	$C^{12} H^{14} O N$
Strychnia	$C^{44} H^{23} O^{4} N^{2}$	Delphinia	$C^{27} H^{19} O^{2} N$
Brucia	$C^{44} H^{25} O^{7} N^{2}$.	Veratria	$C^{68} H^{45} O^{2} N^{2}$

The mode of extracting the various alkaloids depends in great measure upon their properties. Those that are *volatile*, are obtained by digesting the plant with a solution of potash and heating; by which means the alkaloid is liberated from the acid with which it was combined, and distils over. When *not volatile*, the alkaloid is to be extracted by digesting either with water, a diluted acid, or alcohol, according as the salt of the alkaloid contained in the plant, is more soluble in one or the other of these media. From these solutions, the alkaloid, if insoluble in water, can be precipitated nearly pure, by ammonia, or mixed with an insoluble salt, by adding lime, magnesia, oxide of lead, &c., and can be taken up again with alcohol; or the alkaloid may be obtained in combination with any given acid, by adding a salt of lime, magnesia, or lead, which contains the acid, when an insoluble precipitate is again formed, and the salt of the alkaloid left in solution. (See page 271.)

VEGETABLE NEUTRAL PRINCIPLES.

Some of these contain nitrogen in their composition; in others this element is absent. Those which contain nitrogen approach in their properties very closely to the alkaloids; and it is sometimes difficult to separate them from that class of bodies. They unite with some bodies, and form crystallizable compounds: they also form insoluble double salts, with chloride of platinum, and most of them are precipitated by solutions of tannic acid. Their solutions, however, do not exhibit alkaline reactions, and the salts which they form are acid. The most important of those containing nitrogen are the following:

Narcotine	$C^{40}\ H^{20}\ N\ O^{12}$	Narceine	$C^{32}\ H^{24}\ N\ O^{16}$
Chelidonine	$C^{40}\ H^{20}\ N^{3}\ O^{6}$	Piperine	$C^{34}\ H^{19}\ N\ O^{6}$
Theine	$C^{8}\ H^{5}\ N^{2}\ O^{2}$	Theobromine	$C^{9}\ H^{6}\ N^{3}\ O^{2}$
Caffeine	$C^{8}\ H^{5}\ N^{2}\ O^{2}$	Asparagine	$C^{8}\ H_{7}\ N^{2}\ O_{5}+2HO$
Amygdaline	$C^{40}\ H^{29}\ N\ O$		

The class of *neutral vegetable principles* embraces also, among many others, the following:

Salacine	$C^{42}\ H^{29}\ O^{22}$	Oil of lemon*	$C^{10}\ H^{8}$
Populine		Oil of bergamot	$6C^{5}\ H_{4}+2HO$
Columbine		Oil of lavender	$3C^{5}\ H_{4}+2HO$
Quassine		Oil of peppermint	$5C^{5}\ H_{4}+2HO$
Smilacine			
Elaterine		Oil of rosemary	$9C^{5}\ H^{4}+2HO$
Oil of mint	$7C\ H_{4}+O$	Oil of cajeput	$2C^{5}\ H^{4}+2HO$
Oil of origanum	$10C^{5}\ H^{4}+O$	Camphor	$4C^{5}\ H^{4}+2O$
Oil of turpentine	$C^{20}\ H^{16}$		

Those essential oils which contain nitrogen and sulphur cannot be referred to this type; as the oils of mustard, $C^{8}\ H^{5}\ N, S^{2}$, horseradish, garlic, onions, assafœtida, &c.

The *volatile oils* are usually limpid at ordinary temperatures, and have a strong odor, more or less agreeable. They are generally lighter than water, and consist of two portions—a solid called *stearoptine*, or a liquid called *elaoptene*. They are distinguished from the fixed oils by the stain they leave on paper, disappearing entirely on the application of heat. They are very slightly soluble in water, but are soluble in alcohol and ether. By exposure, the volatile oils absorb oxygen, and are converted into resins, and hence plants containing volatile oil generally yield resin also. They are obtained by distillation or expression.—(See page xvi.)

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* The oils of juniper, savine, cubebs, pepper, copaiba, &c., have a similar composition, their atoms being some multiple of $C^{5}\ H4$.

VEGETABLE ACIDS.

Among the principles peculiar to certain orders or genera of plants, are the *vegetable acids*. These possess the usual properties of acids, having a sour taste, reddening vegetable blues, and forming salts with bases; but we meet among them, very commonly, acids possessing the power of uniting with more than one atom of base, and hence called *polybasic*, a property very rare in the inorganic kingdom. In this respect, they closely resemble phosphoric acid, which seems a connecting link between the inorganic and organic acids. By heat they are frequently decomposed into more simple acids. Some of them are met with in many plants, as the *tannic*, *citric*, and *malic acids;* others are confined to particular plants, as the *meconic*, *kinic*, and *aconitic*.

The *mode of their preparation*, as in the case of alkaloids and neutral principles, depends partly on their properties. Thus, if volatile, they are obtained merely by the application of heat; as in the case of *benzoic acid* from, gum benzoin, *cinnamic acid*, from balsam of Tolu and Peru, &c., and valerianic acid, from the valeriana officinalis. If these acids form insoluble salts with any base, they are procured by causing a precipitate, by the addition of such base, washing it, and setting the acids free by the addition of a stronger one. The bases most frequently employed in this process are lime, lead, and baryta, and insoluble precipitates with the vegetable acids are often formed in the preparation of the alkaloids and other principles. This mode of preparation is employed for citric, meconic, kinic acids, &c.

The vegetable acids for the most part contain no nitrogen in their composition, and produce little or no effect on the nervous system. *Hydrocyanic acid* is a product of the decomposition of an azotized principle, and does not exist as such in the vegetable kingdom.

Table of Organic Vegetable Acids, showing the composition of such as are medicinal; arranged according to their power of combining with one, two, or three atoms of base.

Tri-basic Acids.

Citric Acid (lemons, currants, &c.)	$3HO, C^{12} H^{5} O^{11}$
Meconic Acid (Papaveraceæ)	$3HO, C^{14} HO^{11} + 6HO$
Tannic Acid.	$3HO, C^{18} H^{5} O^{9}$

Bi-basic Acids.

Tartaric Acid (Grapes, &c.)	$2HO, C^{8} H^{4} O^{10}$
Gallic Acid (Nut galls, &c.)	$2HO, C^{7} H^{3} O^{5} + HO$
Kinic Acid (Cinchonaceæ)	$2HO, C^{7} H^{4} O^{4}$
Malic Acid (Pomaceæ, &c.)	$2HO, C^{8} H^{4} O^{3}$

Mono-basic Acids

Acetic Acid	HO, C^4 H^3 O^3
Aconitic Acid (Aconitis)	HO, C^4 H^2 O^3
Benzoic Acid (Gum Benzoin)	HO, C^{14} H^5 O^3
Cinnamic Acid (Bals. Tolu, Peru, &c.)	HO, C^{18} H^7 O^3
Copaivic Acid (Copaiba)	C^{40} H^{30} O^4
Fumaric Acid (Iceland Moss)	HO, C^4 HO^3
Oxalic Acid (Polygonaceæ)	HO, C_2-O_3+2HO
Pectic Acid (many vegetable juices)	HO, C^{12} H^{17} O^{11}
Pinic Acid Sylvic Acid } (Resins)	C^{40} H^{30} O^4
Valerianic Acid (Valerianaceæ)	HO, C^{10} H^9 O^3
Viratric Acid (Cevadilla Seeds)	HO, C^{18} H^9 O^7

Table of the Natural Orders containing Non-Medicinal Plants in the Northern and Middle States.

		No. of Species.			No. of Species
1.	Menispermaceæ,	1	28.	Amaranthaceæ,	4
2.	Nelumbiaceæ,	1	29.	Santalaceæ,	2
3.	Saraceniaceæ,	1	30.	Eleagnaceæ,	1
4.	Capparidaceæ,	1	31.	Laururaceæ,	1
5.	Cistaceæ,	6	32.	Cerotophyllaceæ,	1
6.	Droseraceæ,	4	33.	Callitrichaceæ,	1
7.	Elatynaceæ,	1	34.	Podostomaceæ,	1
8.	Illecibraceæ,	4	35.	Empetraceæ,	2
9.	Portulaccaceæ,	3	36.	Balsamifluæ,	2
10.	Tiliaceæ,	1	37.	Platanaceæ,	1
11.	Limnanthaceæ,	1	38.	Linaceæ,	2
12.	Aceraceæ,	5	39.	Typhaceæ,	4
13.	Melastomaceæ,	1	40.	Naiadaceæ,	13
14.	Cactaceæ,	1	41.	Hydrochardaceæ,	2
15.	Grossulaceæ,	5	42.	Orchidaceæ,	34
16.	Cucurbitaceæ,	2	43.	Hypoxidaceæ,	1
17.	Crassulaceæ,	4	44.	Dioscoreaceæ,	1
18.	Dipsaceæ,	1	45.	Pontederiaceæ,	3
19.	Campanulaceæ,	4	46.	Juncaceæ,	18
20.	Primulaceæ,	11	47.	Corumelynaceæ,	2
21.	Lentibulaceæ,	2	48.	Xyridaceæ,	1
22.	Acanthaceæ,	1	49.	Eriocaulonaceæ,	1
23.	Pedaliaceæ,	1	50.	Cyperaceæ,	159
24.	Hydrophyllaceæ,	3	51.	Gramineæ,	124
25.	Polemoniaceæ,	3			
26.	Diapensiaceæ,	1		Total,	468
27.	Convolvulaceæ,	7			

Natural Orders containing Medicinal Plants in the Northern and Middle States.

1.	Ranunculaceæ,	88	6.	Papaveraceæ,	2
2.	Magnoliaceæ,	8	7.	Fumariaceæ,	7
3.	Anonaciæ,	1	8.	Cruciferæ,	81
4.	Berberidaceæ,	4	9.	Violaceæ,	16
5.	Nympheaceæ,	8	10.	Hypericaceæ,	10

	No. of Species.		No. of Species.
11. Caryophyllaceæ,	25	45. Scrophulariaceæ,	38
12. Malvaceæ,	8	46. Verbenaceæ,	5
13. Linaceæ,	2	47. Labiatæ,	45
14. Geraniaceæ,	5	48. Boraginaceæ,	14
15. Oxalidaceæ,	8	49. Solanaceæ,	8
16. Balsaminaceæ,	1	50. Gentianaceæ,	16
17. Anacardiaceæ,	6	51. Apocynaceæ,	2
18. Xanthoxylaceæ,	2	52. Asclepiadaceæ,	10
19. Hippocastinaceæ,	1	53. Oleaceæ,	4
20. Celastraceæ,	4	54. Aristolochiaceæ,	2
21. Rhamnaceæ,	4	55. Chenopodiaceæ,	17
22. Vitaceæ,	5	56. Polygonaceæ,	22
23. Polygalaceæ,	7	57. Phytolaccaceæ,	1
24. Leguminosæ,	59	58. Lauraceæ,	2
25. Rosaceæ	51	59. Thymelaceæ,	1
26. Lythraceæ,	5	60. Ulmaceæ,	4
27. Onagraceæ,	24	61. Euphorbiaceæ,	8
28. Saxifragaceæ,	8	62. Juglandiaceæ,	6
29. Hamamelidaceæ,	1	63. Cupuliferæ,	22
30. Umbelliferæ,	30	64. Myricaceæ,	3
31. Araliaceæ,	5	65. Betulaceæ,	9
32. Cabombaceæ,	1	66. Salicaceæ,	25
33. Caprifoliaceæ,	24	67. Urticaceæ,	10
34. Compositæ,	160	68. Coniferæ,	14
35. Rubiaceæ,	13	69. Araceæ,	7
36. Valerianaceæ,	2	70. Alismaceæ,	7
37. Lobeliaceæ,	7	71. Iridaceæ,	2
38. Ericaceæ,	42	72. Smilaceæ,	14
39. Aquifoliaceæ,	6	73. Liliaceæ,	19
40. Ebenaceæ,	1	74. Melanthaceæ,	10
41. Plantaginaceæ,	6	75. Filices,	41
42. Plumbaginaceæ,	1		
43. Orobanchaceæ,	3	Total,	1020
44. Bignoniaceæ,	1		

Principal Genera of Medicinal Plants in the Northern and Middle States.

Achillea,
Aconitum,
Acorus,
Actæa,
Adiatum,
Æscalus,
Agrimonia,
Aletris,
Allium,
Alisma,
Alnus,
Altherea,
Ambrina,
Amphicarpea,
Andromeda,
Anemone,
Anethum,
Anthemis,
Apios,
Apocynum,
Aquilegia,
Arabis,
Aralia,
Archangelica,
Arctostaphylos,
Arnica,
Aristolochia
Arisæma,
Artemisia,
Asarum,
Asclepias,
Aspidium,
Aster,
Baptisia,
Barbarea,
Benzoin,
Betula,
Berberis,
Brasenia,
Cacalia,
Calla,
Caltha,
Canila,
Cannabis,
Cardamine,

Carduus,
Carum,
Castanea,
Cassia,
Catalpa,
Ceanothus,
Celastrus,
Celtis,
Centaurea,
Cephalanthus,
Cercis,
Cerasus,
Chelidonium,
Chelone,
Chimaphilla,
Cicuta,
Cichorium,
Cimicifuga,
Clematis,
Clethra,
Cnicus,
Collinsia,
Complonia,
Convolvulus,
Conium,
Coptis,
Cornus,
Coriandrum,
Corylus,
Cratægus,
Cuminum,
Cypressus,
Cypripedium,
Cynoglossum,
Datura,
Daucus,
Delphinum,
Dentaria,
Diospyros,
Dirca,
Epiphegus,
Epigæa,
Erechtites,
Erigeron,
Erythræa,
Erythronium,
Euonymus,
Eupatorium,,
Euphorbia,
Fagus,
Flammula,
Fœniculum,
Fragaria,
Frasera,
Fumaria,
Galium.
Gautiera,
Gaylussacia,
Gentiana,
Genista,
Geranium,
Geum,
Gillenia,
Gnaphalium,
Gratiola,
Gymnocladus,
Hamamelis,
Hedeoma,
Helonias,
Helianthus,
Helenium,
Helleborus,
Hepatica,
Heracleum,
Heuchera,
Hibiscus,
Hieracium,
Humulus,
Hydrastis,
Hyoscyamus,
Hypericum,
Ilex,
Impatiens,
Inula,
Iris,
Jeffersonia,
Juglans,
Juniperus,
Kalmia,
Lappa,
Ledum,
Leonurus,
Leontice,
Liatris,
Ligustrum,
Lilium,
Linum,
Linaria.
Liriodendron,
Lithospermum,
Lobelia,
Lycopus,
Lythrum,
Magnolia,
Malva,
Maruta,
Marrubium,
Melilotus,
Melissa,
Menispermum,
Mentha,
Menyanthes,
Mitchella,
Monarda,
Morus,
Myrica,
Nabalus,
Nasturtium,
Nelumbium,
Nepeta,
Nicotiana,
Nuphar,
Nymphea,
Œnothera
Opunta.
Orobanche
Osmorhiza
Oxalis,
Pæderota,
Panax
Papaver,
Pastinaca,
Phaseolus,
Phytolacca,
Pinus,
Plantago,
Pluchea,
Podophyllum
Polygonum,
Polygonatum,
Polypodium,
Polygala,
Populus,
Potentilla,
Prinos,
Prunus,
Ptelea,
Pulmonaria,
Pycnanthemum,
Pyrus,
Quercus,
Raphanus,
Ranunculus,
Rhamnus,
Rhododendron,
Rhus,
Ribes,
Robinia,
Rosa,
Rubus,
Rudbeckia,
Rumex,
Sabbatia,
Sagittaria,
Salix,
Sambucus,
Sanicula,

Sanguinaria,
Sanguisorba,
Saponaris,
Sassafras,
Scrophularia
Scutellaria,
Senecio,
Silene.
Sinapis,
Smilacina,
Smilax,
Solanum,
Solidago,
Spiræa,
Statice,
Stellaria,
Symplocarpus,
Symphytum,
Sysimbrium,
Tanacetum,
Taraxacum,
Taxus,
Thalictrum,
Thuya,
Trillium,
Trifolium,
Triosteum,
Trollius,
Turritus,
Tussilago,
Ulmus,
Urtica,
Uvaria,
Vaccinium,
Valeriana,
Veratrum,
Verbena,
Verbascum,
Veronica,
Viburnum,
Vicia,
Viola,
Vitis,
Xanthoxylum,
Zanthoriza,
Zephrosia,

LINNÆAN, OR ARTIFICIAL CLASSIFICATION OF PLANTS.

Number of Stamens.	1. *Monandria;* one stamen to each flower.
	2. *Diandria;* two stamens.
	3. *Triandria;* three stamens.
	4. *Tetrandria;* four stamens.
	5. *Pentandria;* five stamens.
	6. *Hexandria;* six stamens.
	7. *Heptandria;* seven stamens.
	8. *Octandria;* eight stamens.
	9. *Enneandria;* nine stamens.
	10. *Decandria;* ten stamens.
	11. *Dodecandria;* twelve to nineteen stamens.
Number and Position.	12. *Icosandria;* more than ten stamens inserted on the calyx (usually twenty).
	13. *Polyandria;* more than ten stamens; usually more than twenty; variable.
Number and relative length.	14. *Didynamia;* four stamens, two longest; flowers labiate.
	15. *Tetradynamia;* six stamens, four long and two short; flowers cruciform.
Connection of Stamens by Filaments or Anthers.	16. *Monodelphia;* filaments united into a single set, tube, or column.
	17. *Diadelphia;* filaments united in two sets, flowers papilionaceous.
	18. *Polyadelphia;* filaments united in more than three sets.
	19. *Syngenesia;* anthers united into a ring or tube; flowers compound.
Position of Stamens as respects the Pistils.	20. *Gynandria;* stamens on the pistil or style.
	21. *Monœcia;* stamens and pistils in separate flowers, but on the same plant.
	22. *Diœcia;* stamens and pistils in separate flowers, but on the same plant.
	23. *Polygamia;* stamens and pistils in the same or separate flowers, on the same or on different plants.
	24. *Cryptogamia;* stamens invisible, or wanting.

The 11th, 18th, and 23rd classes have generally been omitted since the time of Linnæus, and their genera distributed among the other classes.

The ORDERS in the first 13 of these classes, are founded on the number of styles, or where these are wanting, of the stigmas and are as follows:

Number of Styles or Stigmas.	1. *Monogynia;* one style to each flower
	2. *Digynia;* two styles.
	3. *Trigynia,* three styles.
	4. *Tetragynia;* four styles.
	5. *Pentagynia;* five styles.
	6. *Hexagynia;* six styles.
	7. *Heptagynia;* seven styles.
	8. *Octogynia;* eight styles.
	9. *Enneagynia;* nine styles.
	10. *Decagynia;* ten styles.
	11. *Dodecagynia;* eleven or twelve styles.
	12. *Polygynia;* more than twelve styles.
Seeds naked or covered.	14. *Gymnospermia,* having naked seeds.
	Angiospermia; having the seeds covered.
Form of Fruit.	15. *Siliculosa;* fruit a silicle, or short pod.
	Siliquosa; fruit a silique, or long pod.

The orders of the 16th to the 18th, and 20th to 22nd classes, are founded on the number of stamens, and bear the names of the first 13 classes, as Monandria, &c.

Character of Flowers.	19. *Polygamia æqualis;* flowers in heads, and all perfect.
	Polygamia Superflua; rays or marginal flowers, pistillate only.
	Polygamia frustrania; marginal flowers neutral, the others perfect.
Character of Flowers.	19 *Polygamia necessaria;* marginal flowers pistillate and fertile; disk flowers staminate and sterile.
	Polygamia Segregata; each flower with its proper involucre.
	Monogamia; flowers solitary, but with united anthers.

The orders of the 23rd class are founded on the characters of the two preceding classes.

Monœcia; unisexual and perfect flowers on the same plant.

Diœcia; the different flowers on different individuals.

Triœcia; perfect flowers on one plant, staminate on a second, pistillate on a third plant.

The orders of the 24th class are natural, and therefore not to be defined by an artificial character. They are—

Filices, or ferns.

Musci, or mosses.

Algæ or lichens, sea-weeds, &c.
Fungi, mushrooms, &c.

To discover the name of a plant by the above (Linnæan) *system*, First examine to see to what class it belongs; next, discover the order, if the order is subdivided into sections, compare the plant with the characters of these subdivisions, to find to which it corresponds; then examine it in reference to the characters of the genera composing this subdivision, to find the genus; finally, by comparing it with a description of the species of that genus it will be identified.

The Natural System of Classification.

It is the aim of the natural system to group together those plants which have the greatest general resemblance to each other, not only in aspect and structure, but also in properties. An acquaintance with the characters of the families of the natural system enables us to determine to which of them any new plant belongs, what are its affinities with others, and, to a very great extent, what are its poisonous or useful properties. We are thus enabled, not only to ascertain the name of any particular plant, but also to obtain a tolerably correct idea of the structure, habits, and often the sensible properties of the group to which it belongs: hence its value to medical men.

The Vegetable Kingdom is embraced under two great natural divisions, viz.:

1. PHÆNOGAMIA, or FLOWERING PLANTS.
2. CRYPTOGAMIA, or FLOWERLESS PLANTS.

The *Phænogamia* are called VASCULARES, because they abound with ligneous and vascular tissue.

The *Cryptogamia* are called CELLULARES, because they abound with cellular tissue.

The Phænogamia are also called COTYLEDONOUS, because they are distinguished for producing seeds composed of determinate parts, as *cotyledons*, and *embryo;* the cryptogamia are called ACOTYLEDONOUS, because they produce certain minute bodies, called *spores*, having no such distinction of parts. We also find in the Phænogamia, a system of compound organs, such as root, stem, leaf, and flower, successively developed on a determinate plan; while in the Cryptogamia, a gradual departure from this plan commences, and they become simple expansions of cellular tissue, without symmetry or proportion. The Phænogamia are very naturally resolved into two subdivisions, EXOGENS and ENDOGENS; the *Exogens* growing by external accretions, having leaves which have reticulated veins, and which fall off by an articulation; and seeds, with two or more *cotyledons* or *acotyledons*. The *Endogens* growing by internal accretions; leaves parallel-veined, and decaying without falling off; the seeds with one cotyledon, or *monocotyledonous*. The *Cryptogamia*, or flowerless plants, are divided into two classes:—

1. ACROGENS; having a stem, and usually furnished with leaves; their stems increase from the apex only, and scarcely at all in diameter.

2. THALLOGENS; which have no such division of parts, being stemless, leafless, and flowerless.

The *Phænogamia* are thus divided into four classes, viz.:

Phænogamia,
1. Exogens, or Dicotyledons; structure of stem exogenous, seeds in a pericarp, embryo with two cotyledons, leaves reticulated.
2. Gymnogens, or Gymnosperms; seeds naked, embryo with two or more cotyledons.
3. Endogens, or Monocotyledons; structure of stem endogenous, seeds in a pericarp, embryo with one cotyledon, leaves parallel veined.
4. Sporagens, or Rhizanths; structure mainly cellular, pericarp containing spores instead of seeds, embryo none.[*]

Cryptogamia,
5. Acrogens; having a regular stem growing from the apex and clothed with leaves.
6. Thallogens; stemless, rootless, and leafless.

The natural relations of the six classes with the higher divisions, may be represented thus:

			Class.
Vegetable Kingdom,	Phænogamia,	Exogens,	1. Angiosperms.
			2. Gymnosperms.
		Endogens,	3. Aglumaceous.
			4. Glumaceous.
	Cryptogamia,		5. Acrogens.
			6. Thallogens.

Sub-classes. In forming sub-classes, most writers have employed artificial methods, for the want of any clear, comprehensive natural one. Thus Jussieu arranges the *Exogens* (*Angiosperms*) in three divisions, founded on the presence, union, or absence, of the petals, as follows:

Polypetalæ; calyx and corolla both present, both having distinct petals.

Monopetalæ; petals united.

Apetalæ; petals wanting.

Orders or families are the most important of all the natural associations. They are formed by associating together those genera which are the most nearly allied *to each other*, or to some one genus, previously assumed as the type. Therefore, as the species form genera, so genera form orders. In systematic works the orders are also associated into alliances, groups, &c., which are intermediate between these; and the sub-classes are designated numerically, thus, group 1st, 2nd, 3rd, &c., or by names derived from a leading order. The orders differ widely as to their extent, some consisting of a single genus, *Sarraceniaceæ*, while others comprehend hundreds of genera, as the *compositæ*. For convenience, the larger orders are broken up into sub-orders or tribes.

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[*] The 3rd and 4th classes in Wood's Botany, are formed from the subdivision *Endogens*, and founded on the presence or absence of *glumes* or *husks*, viz.:

C. III. Aglumaceæ: endogenous, with flowers, perianth verticillate, of one or more whorls of petaloid organs, or wanting. Ex., lily, orchis.

C. IV. Glumaceæ; endogenous, flowers inserted in an imbricated perianth of glumes, instead of a calyx, as, the grasses, grains, &c.

The NATURAL SYSTEM, with its classes and subordinate divisions, may thus be exhibited in one view:

The VEGETABLE KINGDOM, is separated

1st, into grand divisions and subdivisions.
2nd, " classes.
3rd, " sub-classes, alliances, and groups.
4th, " orders and sub-orders.
5th, " genera and sub-genera.
6th, " species and varieties.
7th, " individuals.

(See Wood's Class Book of Botany, Beck, Griffith's Medical Botany, Torrey and Gray, Lindley, and other systematic works on the subject.)

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EXPLANATION OF THE REFERENCES.

L. London
E. Edinburgh
D. Dublin } Pharmacopœias.
U. S. United States

N. O. Natural Orders.

♄. Signifies that the plant is a shrub, or tree.

♃. That it is a perennial.

☉. That it is annual

♂. That it is biennial.

Comp. Implies *components*, showing the chemical constituents of the substance under consideration.

Prep. Its chemical and natural properties.

Oper. Its operation or medicinal effects.

Use. Its medical uses.

Incomp. The incompatibles, or those substances with which it cannot be combined in prescription, without altering either its chemical or its medicinal properties.

Off. Prep. Officinal preparations into which the substance under consideration enters as a part.

The parentheses after the title of any article generally enclose the name of the substance from which it is obtained; if a plant its class and order in the Linnæan system, the natural order the place of its growth, and the kind of plant. If a compound, they enclose the formula of the London College and the United States Pharmacopœia.

The old name of many articles is placed in italics, after their botanical arrangement

CONSPECTUS, &c

ABIĔTIS RĒSĬNA. L. Resina, U. S. Resin of the Spruce Fir. (Pinus *Abies*. The Spruce Fir. *Monœcia Monadelphia* N. O. *Coniferæ*. Europe, America. ♄.)—*Thus*.

Comp. Resin and volatile oil.

Prop. Solid, dry, brittle; externally brownish yellow; internally whitish.

Oper. Rubefacient, diuretic.

Use. Externally, as plasters, in catarrh, pertussis, and dyspnœa.

Off. Prep. *Emplast. Aromat.*, D. *Emp. Galbani*, L. D. *Emp. Opii*, L. *Emp. Picis*, L. *Emp. Thuris*, D. *Emp. Hydrarg.*, U. S. *Emp. Resinæ*, U. S.

ABSINTHĬUM. U. S.—L. E. Artemisiæ Absinthii folia, summitates. D. Wormwood. (Artemisia *Absinthium*. Common Wormwood, *Syngen. Superfl.* N. O. *Asteraceæ*, Indigenous. ♃.) *Absinthium vulgare*.

Comp. An essential oil, a bitter principle, *absinthin* and *absinthic acid*.

Prop. Odor strong and unpleasant; taste bitter, nauseous: extracted by water and alcohol.

Oper. Tonic, antispasmodic, anthelmintic, discutient, antiseptic.

Use. In intermittents, dyspepsia, gout, hypochondriasis, dropsy, and epilepsy not depending on organic changes. Clysters of the decoction are useful in ascarides.

Dose. In substance, ℈j. to ʒj. Infusion (ʒvj. to water Oj.), fʒiv. to fʒxij., three or four times a day.

Incomp. Sulphates of iron and of zinc; acetate and diacetate of lead, nitrate of silver.

ACACĬA. U. S.—L. Gummi Acaciæ, E. Acaciæ Arabicæ Gummi, D. Acacia Gum Arabic. (Acacia *vera*, *Polygam. Monœcia*. N O. *Leguminosæ*. Africa. ♄.) *Arabicum Gummi*.

Comp. Carbon, hydrogen, oxygen, nitrogen, and lime.

Prop. Inodorous, insipid; in irregular pieces, colorless, or of a pale yellow color, hard, brittle, fracture shining, transparent, soluble in water, insoluble in alcohol: spec. grav. 1.355.

Oper. Demulcent, nutritious.

Use. In catarrh, pertussis, ardor urinæ, &c. Mucilage of Gum Arabic is often employed as a vehicle for other substances. To render them miscible, *oils* require three-fourths of their own weight, *balsams* and *spermaceti* equal parts, *resins* two parts, and *musk* five times its weight. In cases of poisoning by acrid substances, mucilages are very useful to sheathe the mucous membrane, and should be given freely.

Dose. In substance, ʒss to ʒij. In decoctions, ad libitum.

Incomp. Goulard's extract, alcohol, sulphuric æther, tincture of muriate of iron.

Off. Prep. *Mucilago Acaciæ*, U. S.—E. D. *Emulsio Acaciæ Arabicæ*, E. *Emulsio Arabica*, D. *Mistura Acaciæ*, L. *Mistura*

Amygdalæ, U. S. *Mistura Cretæ*, U. S.—L. D. *Mistura Moschi*, L. *Mistura Guaiaci*, L. *Confectio Amygdalæ*, L. D *Pulvis Cretæ Comp.*, L. D. *Pulv. Tragacanthæ Comp.*, L. D *Trochisci Carbonatis Calcis*, E. *Trochisci Cretæ*, U. S. *Tro. Glycyrrhizæ*, E. *Tro. Glycyr. cum Opio*, U. S.—E. *Tro. Gummosi*, E.

ACETOSĔLLA. L. Wood Sorrel. (Oxalis *Acetosella*. Common Wood Sorrel. *Decand. Pentagynia*, N. O. *Oxalideæ* Europe, United States. ♃.) *Lujula. folium.*

Prop. Inodorous, taste a sweetish acid; juice coagulates milk; owes its acid properties to *Binoxalate of Potassa*, which is in rhomboidal crystals, of a sour, pungent, bitterish taste; soluble in ten times their weight of boiling water; and contains seventy-two parts *oxalic acid*, forty-seven parts *potassa*, and eighteen *water*.

Oper. Refrigerant, antiseptic.

Use. In bilious and putrid fevers, and inflammatory and scorbutic complaints; on the continent of Europe, the *Binoxalate of Potassa* is used as a substitute for lemonade. It is also very useful in removing iron mould and ink stains from linen, and as a test for *lime*.

Dose. An infusion of a handful in Oij. of water, or boiled in milk in the same proportions, to form a whey, ad libitum.

ACĒTAS FERRI D. Acetate of Iron. (*Ferri Carbonatis partem* j., *Acidi Acetici fort. partes* vj. Digest for three days, and filter.)

Comp. Protoxide of iron, acetic acid.

Prop. Taste styptic, warm.

Oper. Tonic, emmenagogue.

Use. In dyspepsia, hysteria, chlorosis, dropsy, and most cases of general debility.

Dose. ♏x to ♏xxx.

ACĒTAS HYDRARGYRI. D. Acetate of Mercury. (*Hydrargyri pur.* ℥iij. *Acidi Nitrici diluti* ℥ivss. *Acetatis Potassæ* ℥iij. *Aquæ bullientis* ℔viij. Mix the mercury with the acid, and digest until it be dissolved; then mix the solution still hot with the acetate of potassa dissolved in the water, and crystallize.)

Comp. Protoxide of mercury, acetic acid.

Prop. Crystals small shining flakes, soluble in hot water, but scarcely in cold; taste acid, insoluble in alcohol.

Oper. Antisyphilitic, alterative.

Use. In syphilis, but not to be depended on; in cutaneous eruptions externally applied, gr. ij. dissolved in f℥ij. of rose water.

Dose. Gr. j to gr. vj. night and morning.

Incomp. The alkalies.

Should be kept in an opaque bottle, as light blackens it It is the active ingredient of Keyser's Pills.

ACĒTUM. U. S.—L. Acetum Britannicum, Acetum Gallicum, E. Acetum Vini, D. Vinegar.

The density of the French vinegar of the Edinburgh College is 1014 to 1022.

Comp. Acetic acid, water, alcohol, mucilage, tartaric acid, tartrate of potassa, sugar; extractive.

Prop. Odor pungent, taste a pleasant acid, color orange or pale yellow, transparent; spec. grav 1.14.

Oper. Refrigerant, diaphoretic, antiseptic, astringent; externally stimulant and discutient.

Use. In febrile complaints and scorbutus; it has been supposed to counteract the effects of opium and other narcotics, after the stomach has been completely cleared; but this is a mistake, and it should never be employed in such cases; steam of it inhaled in putrid sore throats and in scurvy; as a lotion in bruises, sprains, burns, and chronic ophthalmia. Antilithic, where the *triple phosphates* abound in the urine; diluted with water, it forms the best means of cleansing the eye of small particles of lime.

Dose. f ʒ j. to f ʒ iv. In clysters, f ℥ j. to f ℥ ij. Lotion. ℞ Aceti f ℥ j., Spiritus Ten. f ʒ iv., Aquæ f ℥ viij.

Tests. The color of common vinegar should not be affected by sulphuretted hydrogen. One fluid ounce should saturate ʒ j. of crystallized carbonate of soda; thirty ♏ of nitrate of baryta should completely precipitate f ℥ iv.

Off. Prep. *Acetum distillatum*, U. S.—L. *Acid. acet. camphoratum*, E. D. *Acidum aceticum*, L. E. D. *Cataplasma Sinapis*, L. D. *Ceratum Saponis*, L. D. *Linimentum Æruginis*, L. *Syrupus aceti*, E.

ACETUM DISTILLATUM. U. S.—L. E. D. Distilled Vinegar. (Distil one gallon of vinegar on a sand bath, in a glass retort and receiver. Reserve the first seven pints for use.)

Comp. Acetic acid, water.

Prop. Odor less than that of vinegar; taste less pungent, transparent, colorless. Density 1005.

Oper. Refrigerant, slightly astringent.

Use. The same as that of vinegar; chiefly for pharmaceutical purposes. A piece of blotting paper or rag, wet with distilled vinegar and applied to the skin, excites heat and redness, and is a useful counter-irritant, where a moderate irritation is desired, as in sore throat, the forming stage of croup. rheumatism. It is used in the form of vapor for purposes of fumigation, but it has no efficacy in destroying contagious or infectious matter It is also a good addition in refrigerating lotions containing acetate of lead.

Dose. f ʒ j. to f ʒ iv.

Tests. Unaltered in color by sulphuretted hydrogen or ammonia; not precipitated by nitrate of silver, acetate of lead, chloride of barium, or iodide of potassium; 100 minims saturate gr. viij. of crystallized carbonate of soda; or 100 grs. of the acid, 13 of the sub f ℥ j. is saturated by 35 grs. crystallized *bicarb.* of *potassa*.

Off. Prep. *Liq. Ammoniæ acet.*, L.E.D. *Potassæ acetas*, L.E.D. *Acetas Ferri*, D *Liquor Plumbi diacetatis*, L. E. D. *Plumb. acetas*, L. E. D. *Oxymel*, L D. *Emplastrum Ammoniaci*, U. S.—L. *Acetum Colchici*, L.—U. S *Acetum Scillæ*, U. S.—L *Oxymel Scillæ*, L. *Extractum Colchici Aceticum*, L. *Oxymel Colchici*, D. *Acetum Opii*, U. S.—E.

ACĒTUM CANTHARIDIS, (*epispasticum*) L. E. Vinegar of Cantharidis, (*Epispastic*). (Cantharidis in pulv. ℥ ij. Acidi acetici Oj.)

Comp. Acetate of cantharidin, some animal matter.

Prep. Rubefacient, epispastic, diuretic.

Use. As a counter-irritant in dropsy; to form immediate blisters

Dose. ♏vj. to ♏xvj. as a diuretic.

ACETUM COLCHICI. L. E. D. Vinegar of Meadow Saffron. (*Colchici cormi recent. concis* ℥j. *Aceti dist.* f℥xvj. *Spir. ten.* f℥j.)

Comp. The acrid principle of the bulb (*Colchicia*) dissolved in diluted acetic acid. (f℥j. of proof spirit ordered is to make the acetum keep.)

Prop. Diuretic, but very uncertain; purgative.

Use. In ascites, hydrothorax, and gout.

Incomp. Alkalies, earths, alkaline and earthy carbonates, sulphuric acid.

Dose. fʒss. to fʒj. in any bland fluid.

ACETUM OPII. U. S —E. Vinegar of Opium. ℞ *Opium* in coarse powder ℥viij. *Nutmeg* ℥jss., *Saffron* ℥ss., *Sugar* ℥xij., *Dist. Vinegar* q. s. Digest the opium, nutmeg, and saffron, on a sand bath, with Ojss. *Dist. Vinegar* for 48 hours, and strain. Digest the residue with an equal quantity of dist. vinegar in same way, 24 hours. Put the whole into an apparatus for displacement and return the filtered liquor, as it passes, until it comes away quite clear. When the filtration has ceased, pour distilled vinegar gradually upon the remaining materials till the whole quantity of filtered liquor equals Oiij. Then add the sugar, and by means of a water-bath evaporate to Oiij. and f℥iv —*U. S. Ph.*

Comp. An acetate of morphia, containing the resin and coloring matter of the opium in vinegar.

Prop. Narcotic.

Use. A substitute for tincture of opium; it is less likely to affect the brain than the tincture.

Dose. ♏xx. to fʒss.

ACETUM SCILLÆ. U. S —L. E. D. Vinegar of Squill. (*Scillæ recentis exsiccatæ* ℥xv., *Aceti distil.* Ovj., *Spiritus ten.* Oss. Macerate the squill in the vinegar with a gentle heat in a covered vessel for twenty-four hours; then express the liquor, and set it aside that the feculencies may subside; lastly, add the spirit to the liquor. The U. S. Pharmacopeia directs that the squill should be macerated 7 days; or that it may be prepared by macerating ℥iv. bruised squill in a pint of distilled vinegar 2 days, then putting the mixture into an apparatus for displacement, gradually pouring in distilled vinegar till the quantity of filtered liquor equals Oij.; lastly, adding the alcohol. Diluted acetic acid may be substituted for the vinegar.

Comp. The acrid principle of the bulb (*Scillitina*) dissolved in diluted acetic acid, with a small portion of spirit.

Prop. Taste bitter, acidulous.

Oper. Diuretic, expectorant, emetic, in large doses purgative

Use. In dropsies, asthma, and chronic catarrh.

Dose. fʒss. to fʒij. in cinnamon water or mint water.

Of. Prep. *Oxymel Scillæ*, L. *Syrupus Scillæ*, U. S —E.

ACHILLEA MILLIFOLIUM, *Russian P.* Millfoil. (N O *Asteraceæ.*)

Comp. Volatile oil, bitter extractive.

Prop. Taste subastringent, bitterish.

Oper. Astringent, antispasmodic, antiperiodic.

Use. In hysteria, hæmorrhages, and periodical affections.

Dose. f℥jss. of infusion made with ℥ij. of flowers, in Oss. of water.

ACĬDUM ACĒTICUM. U. S.—L. E. D. Acetic Acid. (*Sodæ Acetatis* ℔ij., *Acidi Sulph.* ℥ix., *Aquæ distillatæ* f℥ix. The U. S. Pharmacopœia directs to pour ℔ss. *Sulphuric Acid* into a glass retort, and gradually add ℔j. *Acetate of Soda*, then distil on a sand bath, with moderate heat, into a glass receiver, till the residuum becomes dry. Mix the resulting liquid with ʒj. *Red Oxide of Lead*, and again distil to dryness. Density 1068.5.

Comp. Carbon 4 eq.=24.48+, hydrogen 3 eq.=3+, oxygen 3 eq. =24, forming acetic acid, eq. 52.48, and water.

Prop. Odor very pungent and grateful; taste acid and acrid, spec grav. 1.048, very volatile, 87 grs. of crystallized carbonate of soda should saturate 100 grains of this acid; contains 30.8 per cent of real anhydrous acid. It should not be colored by hydrosulphuric acid, nor precipitated by nitrate of baryta or nitrate of silver.

Oper. Stimulant, rubefacient, escharotic.

Use. Applied to the nostrils in syncope asphyxia, and headache; destroys corns and warts.

Incomp. Alkalies, earths, alkaline and earthy carbonates.

Off. Prep. *Acidum Aceticum Camphoratum*, E. D. *Acetum Cantharidis*, L. *Potassæ Acetas*, U. S.—L. *Plumbi Acetas*, U. S.—L. *Oxymel*, L. *Acidum Aceticum dilutum*, U. S.

ACĬDUM ACĒTICUM DILUTUM. U. S. Diluted Acetic Acid. (℞ *Acetic Acid* Oss., *Distilled Water* Ov. Mix.)

Prop. f℥j. is saturated by 36 grains of crystallized *Bicarb. of Potassa.*

ACĬDUM ACĒTICUM AROMĂTICUM. E. Aromatic Vinegar. (*Rorismarini sic. folior. Origani, sing.* ℥i. *Lavandulæ sic.* ʒiv. *Caryophyllorum cont.* ʒss. *Acidi Acetici* Ojss. Macerate seven days, and filter the expressed liquor through paper.) *Acetum Aromaticum.*

Comp. Vinegar holding in solution the essential oils of rosemary, sage, lavender, and cloves.

Prop. Odor pungent and aromatic.

Use. As a grateful perfume in sick rooms.

ACĬDUM ACĒTICUM CAMPHORĀTUM. E. D. Camphorated Acetic Acid. (*Acidi Acetici* f℥vjss. *Camphoræ* ℥ss Rub the camphor to powder by means of a little alcohol; then dissolve it in the acid.)

Prop. Odor extremely pungent; volatile.

Oper. Stimulant.

Use. The vapor is snuffed up the nostrils in syncope.

ACĬDUM ARSENIOSUM. U. S.—L. Arsenious Acid.

Comp. Arsenic 2 eq.=75.4+, oxygen 3 eq.=24, eq. 99.4.

Prop. White, opaque, or semi-transparent; spec. grav. 3.7; volatile; emits an odor like *garlic*, when thrown on burning charcoal; tasteless; 100 parts of water, at 60°, dissolve 9.6 of the transparent, 12.5 of the opaque; 1,000 of boiling, 97 of the transparent, and retain 18; 115 of opaque, and retain 29 on cooling.

Use. To prepare the arsenical solution.

ACĬDUM BENZOĬCUM. U. S.—L. E. D. Benzoic Acid. (Take of *Benzoin* ℔j.; put the benzoin, previously mixed with an equal weight of fine sand, into a suitable vessel. Sublime on a sand bath till vapors cease to rise. Deprive the sublimed matter of oil by pressure in bibulous paper, and again sublime.)—U. S. Ph., *Flores Benzoes.*

Comp. Carbon 14 eq.=85.68+, hydrogen 5=5+, oxygen 3=24, eq. 114.68.

Prop. Odor aromatic and fragrant; taste hot, slightly acidulous, and agreeable; soluble in boiling water and alcohol; crystals white, brilliant, ductile, slender needles; should sublime entirely by heat.

Oper. Stimulant; as an expectorant, doubtful; errhine.

Use. In chronic catarrh, but of very little efficacy.

Dose. Gr. x. to ʒss.

Off. Prep. *Tinctura Camphoræ composita,* U. S.—L. D. *Tinct. Opii Ammoniata,* E. *Tinct. Opii camphorata,* U. S.—E. *Tinct Benzoini composita,* U. S.

ACIDUM CITRICUM. U. S.—L. E. D. Citric Acid. *Crystals.*

Comp. Carbon 4 eq.=24.48+, hydrogen 2=2+, oxygen 4=32, eq. 58.48. (Obtained from lemon juice.)

Prop. Sharp acidity of lemon juice; crystals, right rhomboidal prisms, persistent, white, semi transparent; soluble in less than twice their weight of cold water, and in half their weight of boiling water. Incinerated with red oxide of mercury, no ash, or a mere trace is left.

Oper. Refrigerant, antiseptic.

Use. In febrile and inflammatory complaints, and scorbutus; and dissolved in water, instead of recent lemon juice, for the effervescing draught. (Proportion ʒxjss. to water Oj.)

Dose. Gr. x. to ʒss., dissolved in water or any bland fluid.

Incomp. Sulphuric acid, nitric acid, acetates of lead, nitrate and acetate of mercury, alkalies, alkaline sulphurets.

Tests. Acetate of lead for detecting sulphuric acid; potassa for tartaric acid; when incinerated with red oxide of mercury, no ash is left.

ACIDUM HYDROCHLORICUM. L. Acidum Muriaticum, U S. Acidum Muriaticum purum, E. D. Hydrochloric Acid. Aqueous solution of chloro-hydric acid gas.—U. S.

Comp. Chlorine 1 eq.=35.42+1 hydrogen=1, eq. 36.42; real acid 1 atom; water 8 atoms. (*From common salt.*)

Prop. Odor suffocating, taste intensely acid and caustic; nearly colorless when pure, but commonly of a pale yellow color; volatile; the fumes visible; spec. grav. 1.160 to 1.100; spec grav. of acid of commerce 1.180; 100 grains should saturate 132 grains of carbonate of soda.

Oper. Tonic, antiseptic, diuretic.

Use. In typhus; cutaneous eruptions; in gargles in inflammatory and putrid sore throats; in injections in gonorrhœa.

Dose. ♏x. to ♏xx. properly diluted; in gargles, fʒss. to fʒij in f℥vi. of fluid; injection, ♏viij. to water f℥iv.

Incomp. Alkalies, earths, and their carbonates; metallic oxides, sulphuret of potassium, tartrate of potassa, tartar emetic, and most metallic salts.

Tests. Chloride of barium in the diluted acid for sulph. acid; L. ammonia for salts of iron.

Off. Prep. *Acidum Hydrochloricum dilutum,* L. *Acidum Muriaticum dilutum,* U. S.—E. D. *Tinctura Ferri Sesquichloridi,*

L. E. D. *Hydrochloras Baryta*, E. *Antimonii Potassio-tartras*, U. S.—L. E. D. *Ferri Ammonio-chloridum*, L.

ACIDUM HYDROCHLORICUM DILUTUM. L. Acidum Muriaticum dilutum, U. S.—E. D. Diluted Hydrochloric Acid. (*Acidi Hydrochlorici* f℥iv., *Aquæ distillatæ* f℥xij.) fʒj should saturate gr. 32 of crystallized carbonate of soda. 5 gr 1.046.

ACIDUM HYDROCYANICUM. U. S. **DILUTUM.** L. **PRUSSICUM.** D. Diluted Hydrocyanic Acid. *Cyano Hydric Acid, Prussic Acid.* U. S. (*Potassii Ferrocyanidi* ℥ij., *Acidi Sulph.* ℥jss, *Aq. Dist.* Oiss.) (*Prussic Acid* may be prepared for immediate use in the following manner. Take of *Cyanuret of Silver* grs. Lss., *Muriatic Acid* grs. 41. *Distilled Water.* ℥j Mix the muriatic acid with the distilled water, add the cyanuret of silver, and shake the whole in a well-stopped vial. When the insoluble matter has subsided, pour off the clear liquor and keep it for use.)—*U. S. Phar.* 100 grains of the acid, treated with solution of nitrate of silver, should form gr. x. of cyanide of silver.

Comp. 1 eq. cyanogen=26.39+, hydrogen 1 eq. 27.39. Anhydrous hydrocyanic acid diluted with about thirty parts of water.

Prop. Colorless, transparent, with a peculiar odor; taste sweetish and bland at first, afterwards pungent and acrimonious; very volatile; decomposed by a high temperature and light, 100 grains contain two grains of pure hydrocyanic acid.

Oper. Sedative, antispasmodic.

Use. In spasmodic coughs; asthma, hooping-cough, nervous affections, hiccough, palpitation of the heart, and in allaying the irritability of the stomach in dyspepsia. Prussic acid may be employed with great benefit in cases of chronic neuralgic affections of the stomach. In these, it is highly useful in preparing this organ to bear other remedies, such as the vegetable and mineral tonics. It should be given in increased doses, till some physiological effects are produced; then continued in rather a diminished quantity. As a local application, properly diluted, it is useful in abating the itching in Impetigo and pruriginous affections.

Dose. ♏iv. gradually increased to ♏viij., in a glassful of water, almond emulsion, or infusion of cinchona. When an overdose has been taken, the effects are best counteracted by ammonia, chlorine, brandy, and the cold affusion.

Incomp Metallic oxides, chlorine.

Tests. 100 grains treated with nitrate of silver should precipitate gr. x. of cyanide of silver; if iodo-cyanide of potassium and mercury redden the acid, it contains some other acid. Nitrate of baryta causes no precipitate in the pure acid.

ACIDUM NITRICUM. U. S.—L. D. E. Acidum Nitricum purum, E. Nitric Acid.

Comp. Nitrogen 1 eq.=14.15+, oxygen 5=40, eq.=54.15. (From Nitre, *Nitras Potassæ*.)

Prop. Odor suffocating, taste very acid and caustic, corrosive, liquid, colorless, transparent; absorbs water from the air; tinges the skin yellow. Spec. grav. 1.504; spec. grav. of acid of commerce 1.380. 100 grains should saturate 217 of carbonate of soda. It should not precipitate solution of nitrate of silver or of nitrate of baryta, when diluted with distilled water.

Oper. Tonic, antiseptic, antisyphilitic, escharotic.

Use. The strong acid is seldom used for any other than pharmaceutical purposes; in the form of vapor, it is extracted from nitre ʒss. and sulphuric acid ʒv. in a saucer, placed on a pipkin of hot sand, for the purposes of fumigation.

Incomp. Spirit of lavender and the strong tinctures, in any large quantity; and the essential oils; metallic oxides.

Off. Prep. *Acidum Nitricum Dilutum.* U. S.—L. E. *Argenti Nitras.* U. S.—L. *Ung. Hydrarg. Nit.* L.—U. S. *Hydrargyri Nitrico-oxidum.* L. *Spiritus Ætheris Nitrici,* L. E—U. S.

ACIDUM NITRICUM DILUTUM. U. S.—L. E. D. Diluted Nitric Acid.

Comp. Nitric acid f℥j.; water f℥ix. L. ac. f℥iv+aq. f℥vj. E. aq. f℥iij+aq. f℥iv. D. (f℥j. contains ♏vj. of the strong acid, L.)

Prop. Spec. grav. 1.080. L. The same as nitric acid in a weaker degree. 100 grs. should saturate 31 grs. of crystallized carb. of soda.

Oper. The same as that of nitric acid.

Use. As a drink, diluted largely, in fevers of the typhoid kind; in chronic affections of the liver, attended with a redundant and hasty formation of bile; and in dyspepsia. As a remedy in venereal complaints; yet in this climate it is not to be depended on, but it is a very useful adjunct to mercury, and allays the violent irritation induced by it. It is also very useful in the cure of old ulcerated legs.

Dose. ♏x. to ♏xi. in f℥iij. of water, twice or thrice a day.

ACIDUM NITRO-MURIATICUM. U. S.—D. Nitro muriatic Acid. (*Acidi Nitrici, mensura, partem* i.; *Acidi Muriatici, mensura, partes* ij. Mix them in a vessel kept cool, and preserve the mixture in a well-stopped bottle, in a cool, obscure place.)

Prop. Odor suffocating, color pale yellow

Oper. Stimulant, antiseptic.

Use. Largely diluted. It has been strongly recommended in malignant scarlatina, in chronic affections of the liver, and in syphilis; and still more diluted, as a bath, in chronic derangement of the hepatic secretion, which it improves, and acts gently on the bowels.

Dose. ♏viij. to ♏xx. in f℥iij. of water, twice or thrice a day When used as a bath, the mixed acid should be added to the water until it tastes as sour as weak vinegar.

Incomp. Oxides, earths, alkalies, the sulphurets, and the acetates of potassa and of lead.

ACIDUM PHOSPHORICUM DILUTUM. L. Diluted Phosphoric Acid. (*Phosphori* ℥j., *Acidi Nitrici* f℥iv., *Aquæ Destillatæ* f℥x.)

Comp. Phosphorus 2 eq.=31.4; oxygen 5 eq.=40; equiv. 71.4. Spec. grav. 1.064.

Prop. Colorless, inodorous, strongly acid, fluid

Oper. Tonic.

Use. In disposition to urinary deposition of the phosphate of lime; in general debility.

Dose. ♏xx. to fℨj.

Tests. 100 grains saturate 62 of carbonate of soda; a precip-by chloride of barium insoluble in nitric acid indicates sulph acid.

ACĬDUM PYROLIGNUM. E. Pyroligneous Acid, (from destructive distillations of wood.)

Comp. and *Prop.* The same as those of acetic acid; spec. grav. 1.034. 100 minims should neutralize 53 grains of carbonate of soda.

Use. The same as diluted acetic acid.

ACĬDUM SUCCĬNICUM. D. E. Succinic Acid. *Sal Succini.*

Comp. Carbon 4 eq.=24.48+; hydrogen 2 eq.=2+; oxygen 3 eq.=24, eq. 50.48; (obtained from amber.)

Prop. Taste sour; crystals four-sided rhomboidal plates, white, transparent; soluble in hot water, and hot alcohol; volatile.

Incomp. Mucilage, oils.

This acid is never, or very rarely, used in medicine.

ACĬDUM SULPHŪRĬCUM. U. S.—L. Acidum Sulphuricum purum, E. Acidum Sulphuricum venale, D. Sulphuric Acid. *Acidum vitriolicum.*

Comp. Of sulphur 1 eq.=16.1+; oxygen 3 eq.=24, eq. 40 1; and water; or acid 81.6; water 18.4.

Prop. Inodorous; strong acid taste; corrosive fluidity dense, apparently oily; transparent, colorless. Spec. grav. 1.845. (1.850 ad 1000, d.) It has a powerful attraction for water Congeals at —15.

Oper. Escharotic, stimulant, rubefacient, tonic, astringent, refrigerant.

Use. In local pains, in the form of an ointment made of lard f℥j., sulphuric acid ʒj.; and in scabies, with ʒss. of the acid to lard ℥j.

Tests. Distilled water should cause no muddiness; solution of sulphate of iron no redness at the point of contact.

Off. Prep. Used in preparing *Acidum Citricum, Hydrochloricum, Nitricum, Tartaricum, Acidum Sulphuricum Purum*, D. *Acid. Sulphur. Dilut.*, U. S.—L. E. D. *Acid. Sulphur. Aromaticum*, U. S.—E. *Ferri Sulphas*, U. S.—L. E. D. *Hydrarg. Bichloridum*, U. S.—L. E. D. *Zinci Sulphas*, U. S.—L. *Sulphas Potassæ*, L. *Potassæ Bisulphas*, L. E. *Subsulphas Hydrargyri Flavus*, E. D.

ACĬDUM SULPHŪRICUM PURUM. D. Pure Sulphuric Acid. (*Acidi Sulphurici venalis libram.* Pour it into a colorless glass retort, and having luted to it a receiver of the same kind, apply heat to the retort until the twelfth part of the fluid has distilled over, which is to be rejected as watery. The receiver being again joined, distil to dryness. Put some thin slips of platina in the retort with the acid to prevent it from boiling over.) The sp. gr. is 1.845. The acid should be preserved in a stopped bottle.

Prop. and *Med. Use.* The same as the common acid.

ACĬDUM SULPHŪRĬCUM DILŪTUM. U. S.—L. E. D. Diluted Sulphuric Acid. (*Acidi Sulphurici* f℥jss. *Aquæ distillatæ* f℥xivss. Mix gradually. The Edin. Coll. order *ac.* f℥j. +*aq* f℥xiij.: the Dub. *ac.* ℥j.+*aq.* ℥vij. *pondere.*) The present acid is stronger than the diluted acid of the former London Pharmacopœia nearly in the proportion of 9 to 6.

Prop. Inodorous, strong acid taste, transparent, colorless.

Oper. Tonic, astringent, refrigerant.

Use. In dyspepsia, diabetes, menorrhagia, hæmoptysis, cutaneous eruptions, hectic; in gargles, in cynanche, and to check salivation. Sulphuric acid is an excellent tonic, and also possesses refrigerant and astringent properties, rendering it a valuable remedy in cases where we wish to avoid diarrhœa In cases of low and hectic fever, attended with copious perspiration, it is very beneficial, as well as in hematemesis. It is also useful conjoined with saline aperients, when the urine has a tendency to phosphatic depositions, attended with loss of appetite, impaired digestion, foul tongue, &c. It is usually given with some bitter infusion, as cascarilla, columbo, cinchona, quassia, &c.

Dose. ♏x. to ♏xl. largely diluted; in gargles f ʒ j. to f ʒ iij. in f ℥ viij. of fluid.

Off. Prep. *Acidum Benzoicum*, E. *Infusum Rosæ*, L. E. D.

ACIDUM SULPHURICUM AROMATICUM. U. S.—E. Aromatic Sulphuric Acid. (*Spiritus rect.* Ojss. *Acidi Sulphurici* (commercial) ℥ iijss. *Cinnamomi cort. cont.* ℥ jss. *Zingiberis rad. cont.* ℥ j. Add the acid gradually to the spirit, and digest the mixture with a very gentle heat in a closed vessel for three days; moisten the mixed powder with a little of the acid; let the mass rest for 12 hours, then put it into a percolator, and transmit the rest of the acid spirit.) *Acidum vitriolicum aromaticum.*

Comp. An imperfect æther, with sulphuric acid predominating and holding dissolved the essential oil of cinnamon and of ginger.

Prop. Odor aromatic, taste acid and slightly æthereal, color brownish.

Use. In dyspepsia; the debility following intermittents, and other fevers, combined with vegetable bitters; and in chronic asthma.

Dose. ♏x. to ♏xxx. in fluids, twice or thrice a day.

ACIDUM TANNICUM. U. S. Tannic Acid. (Tannin.) ℞ *Gallæ. pulv. Æther Sulphuric. a. a. q. s.* put into a glass adapter, loosely closed at its lower end with carded cotton, sufficient powdered galls to fill half of it; fit the adapter accurately to the mouth of a receiving vessel, fill it with the sulph. æther, and close the upper orifice tightly. The liquid which passes separates into two unequal portions, of which the lower is much smaller in quantity, and much denser, than the upper. When the æther ceases to pass, pour fresh portions upon the galls, till the lower stratum of liquid in the receiver no longer increases. Then separate this from the upper, put it into a capsule, and evaporate with a moderate heat to dryness Lastly, rub what remains into powder. The upper portion will yield a quantity of æther by distillation, which, when washed, may be employed in a subsequent operation.—*U. S. Phar.*

Comp. Carbon, oxygen, hydrogen.

Prop Yellowish-white color, taste strongly astringent; without bitterness, inodorous; very soluble in water, less so in alcohol and æther; insoluble in the fixed and volatile oils. Its solution reddens litmus, produces with a solution of gelatine a white flocculent precipitate, with the salts of the sesqui-oxide of iron a bluish black precipitate, and with solutions of the vegetable alkalies, white precipitates; very soluble in acetic acid.—*U. S. Phar.*

Use. Tannic acid may be advantageously employed in all the passive hemorrhages, especially menorrhagia; also in diarrhœa, where we wish simply an astringent effect. It possesses a great advantage over most other astringents, from the smallness of dose in which it may be given, and from its being less liable to irritate the stomach and bowels.

Dose. From 2 to 4 grs. every three hours.

ACIDUM TARTARICUM. U. S.—L. E. D. Tartaric Acid. ℞ *Potassæ bitartratis* ℔iv., *Aquæ distillatæ ferventis Cong.* iss., *Cretæ præparatæ* ℥xxv.- ʒvi., *Acidi Sulphurici diluti* Ovij. ℥xvij., *Acidi hydrochlorici* f℥xxvjss. *vel q. s. s.* Boil the bitartrate of potassa with two gallons of the water, and add gradually half the prepared chalk; then add the rest of the chalk dissolved in hydrochloric acid, diluted with Oiv. of distilled water; let the tartrate of lime subside, then pour off the fluid and wash the tartrate of lime with distilled water until it is tasteless. Then pour upon it the diluted sulphuric acid; boil for a quarter of an hour. Filter the supernatant fluid, and evaporate with a gentle heat until it crystallize. Dissolve the crystals again, and a third time in water, strain as often, and boil down, and leave at rest.

Comp. Carbon 4 eq.=24.48+ hydrogen 2=2— oxygen 5=40— equiv.=66.48.

Prop. Crystals white, imperfectly transparent, in irregular groups. Spec. grav. 1.5962. They do not effloresce nor deliquesce when exposed to the air; they melt into a transparent mass when heated above 212°; and after this process they deliquesce. They dissolve readily in water, combine with earths, alkalies, and metallic oxides, and consist of 1 part of real acid, and 1 of water.

Oper. Refrigerant, antiseptic.

Use. In inflammatory affections, fevers and scorbutus.

Dose. Gr. x. to ʒss. dissolved in water.

Incomp. Alkalies and their carbonates, all the salts of potassa.

Tests. The precipitate by acetate of lead not dissolving in dilute nitric acid indicates a sulphate. When incinerated with red oxide of mercury, it should leave no residue.

ACONITINA. L. Aconitum, U. S. *Aconite*, Aconitina. (*Aconiti rad. exsiccati et contusi* ℔ij., *Spir. rect. cong.* iij. *Acidi sulph. diluti*, *Ammoniæ liq.*, *Carbonis animalis purif.*, *sing q. s. s.*)

Comp. Carbon, oxygen, hydrogen, nitrogen.

Prop. Whitish powder, inodorous, taste bitter, acrid, soluble in 150 times its weight of water at 60°, and 50 at 212°; alcohol and æther dissolve it readily; permanent in the air; with acids forms dry, gummy, bitter masses, which the alkalies decompose.

Use. Externally counter-irritant: too poisonous to be used internally. If the ointment, or alcoholic solution of aconitina, be rubbed into the skin, it causes intense heat, tingling, and numbness, which continue for 12 or 18 hours. Dr. Turnbull directs the *ointment* to be made by rubbing up 16 grs. *aconitina*, with ʒss. *olive oil*, and ℥j. *of lard*, to be rubbed in with the finger for several minutes. The *solution* for embrocation is made by dissolving grs. viii. of *aconitina* in ℥ij. of *rectified spirits*, to be applied with a sponge, but not where the skin is abraded.

ACONĪTI FOLĬA ET RADIX. L. Aconitum paniculatum; Folia, D. Aconitum, E. Aconite, or Monk's-hood Leaves. (Aconitum *paniculatum*. Monk's-hood; *Polyand. Trigyn* N. O. *Ranunculaceæ*, Mountains of Germany and Siberia, U States. ♃.)

Prop. Dried leaves inodorous, taste subacrid; bitterish; fresh very acrid.

Oper. Narcotic, sudorific, deobstruent.

Use. In chronic rheumatism, scrofula, scirrhus, palsy, amaurosis, and venereal nodes. Aconite is a very powerful topical remedy, in the form of tincture, in cases of rheumatism and neuralgia. It produces a sense of *numbness* and *tingling*, and is ranked among the *cerebro-spinants*. When swallowed in sufficient doses, it produces numbness and tingling of the mouth, fauces, and extremities, vomiting, contracted pupil, and failure of the circulation. It seems to possess a decidedly sedative action upon the heart, and is regarded by many as a specific in subduing inflammatory action, especially that of gout and rheumatism. It is useful also in nervous headache, spinal irritation, and all kinds of neuralgia.

Dose. Gr. j. gradually increased to gr. v. twice or thrice a day of the extract, from gr. ss. to gr. j., of the tincture from 10 to 40 drops, gradually increased.

Off. Prep. *Aconitina*, L. *Extractum Aconiti*, L.

ACORUS. L. See Calami Radix.

ADEPS. U. S.—L. Axungia, E. Adeps Suillus, D. Hog's Lard. (Sus scrofa, the Hog. Cl. *Mammalia*, Ord. *Pachyderma*, Cuv.)

Comp. *Elaine* 62. *Stearine* 38.

Prop. Inodorous, insipid, soft, unctuous, white.

Oper. Emollient.

Use. In the formation of ointments, cerates, plasters, and liniments.

Off. Prep. *Emplast. Cantharidis*, L. *Ceratum Sabinæ*, L. *Unguenta Varia.* *Ceratum Simplex*, U. S. &c.

ÆRŪGO. L. E. Subacetas Cupri, U. S.—D. Verdigris, impure diacetate of copper.

Comp. Acetate of copper 43, black oxide of copper 27, water 30 pts. in 100.

Prop. Mass difficult to break, dry, not deliquescent, foliaceous, of a fine bluish-green color; taste salt; completely soluble in sulphuric acid, and in hydrochloric acid; partially in water.

Oper. Tonic, emetic, escharotic, detergent.

Use. Scarcely ever used internally; applied to the callous edges of sores, and to consume fungus, but now seldom used. It is sometimes used as a lotion (gr. j. in rose or elder-flower water f℥j.) in scorbutic ulcerations of the mouth, but it cannot be much recommended.

Dose. As a tonic under gr. ⅛; as an emetic from gr. j. to gr. ij.

Off. Prep. *Ærugo Præparata*, D. *Unguentum Subacetatis Cupri*, E.—U. S.

ÆTHER NITROSUS. D. Nitrous Æther.

Comp. Nitrogen 16.41, carbon 89.27, oxygen 3 .73, hydrogen 9.59, in 100 pts., or 1 eq. of æther, 37.48+1, nitrogen =14.15+3 oxygen =24 equiv.=75.63, (from alcohol and nitrous acid.)

Prop. Nearly the same as those of sulphuric æther, but more volatile, and its odor is less fragrant; spec. grav. 900; little soluble in water; soluble in alcohol.

Oper. and *Use.* The same as those of sulphuric æther.

ÆTHER SULPHURICUS. U. S.—L. E. D. Sulphuric Æther *Spir. Vini. Rect.* ℔iij. *Sulph. Acidi* ℔ij. *Carb. Potassæ*, sicc ℥j. Add the acid to ℔ij. of the spirit in a retort; place on a sand bath and raise the heat quickly, so that the fluid may quickly boil, and the æther may pass into a cooled receiver Distil until a heavier portion begins to pass over. After the heat has subsided, add the rest of the spirit to the liquor in the retort, and redistil. To the distilled fluids add the carbonate of potassa; agitate for an hour; lastly, redistil. (The U. States Pharmacopœia directs to take of *Alcohol* Oiv., *Sulphuric Acid* Oj., *Potassa* ʒvj., *Distilled Water* f℥iij.) *Æther vitriolicus.*

Comp. Oxygen 1 eq.=8+, carbon 4 eq.=24.48+ hydrogen 5=5; —equiv. 37.48. Spec. grav. .750. (735, E.)

Prop. A limpid, colorless, very inflammable, volatile liquor; odor penetrating and fragrant; taste hot and pungent; inflammable; readily mixes with alcohol; soluble in ten parts of water; produces cold during its evaporation. Its volume is not lessened when agitated with half its weight of concentrated solution of chloride of calcium.

Oper. Diffusibly stimulant, narcotic, antispasmodic; externally refrigerant.

Use. Hysteria, asthma, tetanus, epilepsy, and other spasmodic complaints; externally in head-ache, and dropped into the meatus in ear-ache; it has also been used in burns.

Dose. ♏xx. to fʒij. in fʒxij water, or other fluid.

Test. If it redden litmus strongly it has been improperly prepared.

Off. Prep. *Spiritus Ætheri Sulphurici comp.*, L.

SPIRITUS ÆTHERIS SULPHURICI. E. Spirit of Sulphuric Æther. (Sulphuric Æther, *a pint*; Rectified Spirit, *two pints.*)

Comp. Alcohol holding in solution sulphuric æther.

Prop. Odor fragrant, taste warm.

Oper. Stimulant, stomachic.

Use. In weakness of the stomach, flatulencies, and languor.

Dose. fʒss. to fʒij. in bitter infusions.

SPIRITUS ÆTHERIS SULPHURICI COMP. U. S.—L. Compound Spirit of Sulphuric Æther. (Sulph. Æther f℥viij., Rect. Spir. f℥xvj., Æthereal Oil fʒiij.)

Prop. Stimulant, antispasmodic, anodyne.

Dose. From fʒss. to fʒij. in f℥jss. of water.

ALCŎHOL. U. S.—L. E. D. Alcohol. (*Rectified Spirit distilled from Chloride of Calcium, or Carb. Potassa.*)

Comp. Oxygen 34.79, carbon 52.17, hydrogen 13.04=100, or 3 eq hydrogen=3+2, carbon=12.24+1, oxygen=8, equiv.=23 24.

Prop. Odor fragrant, penetrating; taste pungent, burning; colorless; transparent; boils at 174°; it dissolves all the vegetable secretions, either wholly or partially, except gum, dissolves also ammonia, potassa, iodine, soda. Spec. grav 0.815.

Oper. Stimulant (*powerful and diffusible*) sedative.

Use Scarcely ever used internally in its pure state, but some times advantageously in a highly diluted form; in cases of debility and low fevers; externally as a fomentation in muscular pains; to burns; and to restrain hemorrhages. The use of alcohol as a medicine has been much diminished within the last ten years. It is found unsuited to a great majority of cases of disease, and when employed, too often inducing an artificial appetite, not easily overcome. From its strong attraction for water, it causes thickening or scirrhus of the stomach, and an indurated state of the liver; and from its powerful effects upon the nervous system, it induces epilepsy, tremors, coma, mania, and death. For these reasons, and that we have useful substitutes, it should seldom be prescribed.

Off. Prep. *Omnes Spiritus*, U. S. *Spir. Ammoniæ Fœtidus*, D *Æther Sulph.*, L. E. D. *Æther Nitrosus*, D. *Spiritus Ammoniæ*, L. E.

ALCOHOL DILUTUM. U S. (*Alcohol, Distilled Water*, a a Oj. *Mix.* *Spec. grav.* 0.935.)

ALLIUM. U. S.—L. E. Allii sativi Bulbus, D. Garlic Bulbs. (Allium Sativum, Garlic, *Hexand. Monogyn.* N. O. *Liliaceæ*. Sicily, Britain, U. States. ♃.)

Comp. Sugar, gum, albumen, extractive; a heavy, yellow, fetid, acrid, volatile oil, which is the active principle, and contains sulphur.

Prop. Odor strong, offensive, and penetrating; taste sweetish, biting, and caustic; these are dissipated by coction.

Oper. Stimulant, diuretic, expectorant, emmenagogue, diaphoretic, and anthelmintic; extremely rubefacient, maturant, and repellent

Use. In cold leucophlegmatic habits, dropsy, rheumatalgia, humoral asthma, and hysteria. Intermittents have been cured by it. The juice dropped into the ear, in atonic deafness, is a very effectual remedy; and it is also beneficial in herpetic eruptions, formed with oil into an ointment. A poultice of it over the pubis has been found useful in atony of the bladder.

Dose. One to six cloves, swallowed without chewing, twice or thrice a day. Of the juice fʒss. to fʒij. mixed with sugar or syrup. In pills with soap or calomel, gr. xx. to ℈ij.

The virtues of the genus Allium depend on an acrid principle, soluble in water, alcohol, acids, and alkalies.

ALLII CEPÆ BULBUS. D. The Bulb of the Onion. (Allium *Cepa* The Onion. *Hexand. Monogyn.* N. O. *Liliaceæ.* Europe. ♃.)

Prop. Odor strong, offensive, and penetrating; taste sweetish, pungent. These are dissipated by coction.

Oper. Stimulant, diuretic, expectorant.

Use. On account of the free phosphoric acid it contains, it is supposed to be useful in calculous cases; but it is chiefly used as a cataplasm in slowly suppurating tumors, and for ear-ache.

ALOES. L. Aloe. U. S.—E. Aloes Socotrina Barbadensis—Indica—Socotrina. D. (Aloe Spicata. The Socotrine Aloe *Hexand. Monogyn.* N. O. *Liliaceæ.* Cape of Good Hope. ♃.) *Aloe.*

Comp. Peculiar bitter principle (*Aloesin*) 73 per cent, coloring principle 2t per cent.

Prop. Odor not unpleasant, rather fragrant; taste very bitter not unlike that of animal bile, and slightly aromatic; color reddish brown with a shade of purple; mass hard, friable fracture conchoidal and glossy;. soluble in diluted alcohol; powder of a bright cinnamon yellow color.

Oper. Cathartic, warm and stimulating, emmenagogue, anthelmintic, stomachic; hurtful in hemorrhoids. Aloes acts chiefly on the large intestines, and produces catharsis by increasing peristaltic or muscular action, and not by increasing the secretions. It usually sits well on the stomach, promotes appetite and digestion, and is one of the most valuable articles of the Materia Medica.

Dose. To act as a cathartic, gr. ij. to gr. x.; as an emmenagogue, gr. j. to gr. ij. twice or thrice a day. The form of a pill is the most convenient mode of exhibition, though the *compound decoction* is our favorite preparation.

Off. Prep. *Decoctum Aloes Compositum*, L. D. *Extractum Aloes purif.*, L. D. *Ext. Colocynthidis Comp.*, U. S.—L. D. *Tinct. Aloes*, L. E. D.—U. S. *Tinct. Aloes Comp.*, L. E. D. *Tinct. Aloes Ætherea*, E. *Tinct. Benzoini Comp.*, U. S.—L. E. D. *Tinct. Rhei et Aloes*, U. S.—E. *Vinum Aloes*, L. E. D. *Pulvis Aloes Comp.*, L. *Pil. Aloes Comp.*, L. D. *Pulv. Aloes cum Canella*, D. *Pil. Aloeticæ*, E. *Pil. Aloes cum Myrrha*, U. S.—L. E. D. *Pil. Cambogiæ Comp.*, L. *Pil. Aloes et Assafœtidæ*, E.—*cum Colocynthide*, E. *Pil. Rhei Comp.*, L. E. *Pil. Scammonii Comp. cum Aloe*, D. *Pil. Sagapeni Comp.*, L.

ALOE HEPATICA, EXTRACTUM. D. Barbadoes Aloes. (*Aloes perfoliata*. Class and order as above. Barbadoes, Greece. ♃.) *Aloe Barbadensis.*

Comp. As above, but with a larger portion of bitter principle.

Prop. Odor very disagreeable, intensely bitter, and nauseous, powder of a dull olive yellow.

Oper. As above, but not so frequently employed.

ALTHÆÆ FOLĬA ET RADIX. U. S.—L. E. D. Marsh Mallow Leaves and Root. (Althæa *Officinalis*, Marsh Mallow *Monadelph. Polyand.* N. O. *Malvaceæ*. Indigenous ♃.)

Prop. Inodorous; taste sweetish, mucilaginous when chewed yields its mucus to water by coction.

Oper. Emollient, lubricating, demulcent.

Use. In pulmonary and intestinal affections; ardor urinæ; calculus; externally in fomentations, clysters, and gargles.

Off. Prep. *Decoctum Althææ Officinalis*, E. *Syrupus Althææ* L. E.

ALŪMEN U. S.—L. E. D. Alum. (*from Schistose Clays.*)

Comp. Sulphate of alumina, with excess of acid, 36.85; sulphate of potassa 18.15; water 45.00 parts (*Berzelius*), or 1 eq. of alumina=51.4+1. of potassa 47.15+4, of sulphuric acid=160.4+24, of water=216: equiv.=474.95 in the crystallized state.

Prop. Crystals regular octahedrons; but generally in large white semi-transparent masses; taste sweetish, styptic; effloresces in the air; 16 pts. water at 60° dissolve 1 part of alum.

Oper. Tonic, astringent; and in large doses laxative.

Use. In hemorrhages, leucorrhœa, diabetes, colica pictonum externally in relaxation of the uvula, ophthalmia, gleet, and fluor albus.

Dose. Grs. x. to ℈i. united with an aromatic; or in whey made with ʒ ij. of the powder and Oj. of hot milk, a teacupful occasionally; in gargles ʒss. in f℥iv. of fluid; in collyria and injections gr. xij. in f℥vj. of rose water. A saturated solution is a useful styptic. *Alum Curd* is a good cooling external application in ophthalmia and other diseases; made by beating up the white of an egg with a piece of alum till it forms a coagulum.

Incomp. Potassa and potassæ carbonas, sodæ carbonas, ammonia, lime, magnesia, acetate of lead, infusion of galls.

Off. Prep. *Alumen Exsiccatum*, L. E. D. *Liquor Aluminis Comp.*, L. *Pulv. Aluminis Comp.*, E.

ALŪMEN EXSICCĀTUM. U. S.—L. E. Alumen Siccatum, D. Dried Alum. (Melt the alum in an earthen vessel over the fire, until the ebullition cease.)

Comp. As above, without the water of crystallization.

Prop. Dry, friable, white, opaque.

Oper. Escharotic.

Use. To destroy fungus in ulcers; internally in colic.

Dose. Gr. iv. to xij.

AMMŌNĬÆ ACETĀTIS AQUA. E. See *Liquor Ammoniæ acetatis.*

AMMŌNĬÆ SESQUICARBŌNAS. L. Ammoniæ Carbonas, U. S.—E. D. Sesquicarbonate of Ammonia. (Take of *Muriate of Ammonia* ℔j., *Chalk, dried*, ℔jss., pulverize them separately; then mix them thoroughly, and sublime with a gradually increasing heat.)—*U. S. Phar.*

Comp Ammonia 21.52, carbonic acid 55.70, water 22.78=100 parts, or 3 eq. carb. acid 66.36+3, ammonia=51.45+3, water =27; equiv. 144.31: but the quantity of acid varies according to the heat employed in the preparation.

Prop. A white, striated, crystallized mass: odor and taste pungent and ammoniacal; soluble in 4 pts. water at 60°; insoluble in alcohol; effloresces in the air; sublimed by heat.

Oper. Stimulant, antacid, diaphoretic, antispasmodic.

Use. In hysteria, dyspepsia, chronic rheumatism; applied to th nostrils in syncope.

Incomp. Acids, potassa fusa, liquor potassæ, magnesia, carbonates, alum, chloride of calcium, bitartras and bisulphas potassæ, salts of iron with the exception of the potassio tartrate, bichloride of mercury, salts of lead, sulphate of zinc.

Dose. Gr. v. to ℈i. in pills, or in any bland fluid. Gr. xxx. are an emetic.

Off. Prep. *Liquor Ammoniæ Sesquicarbonatis*, L. E. D. *Liquor Ammoniæ Acetatis*, U. S.—L. E. D. *Cupri Ammonio-Sulphas*, L. E. D *Liquor Ammoniæ*, U. S.

LIQUOR AMMONIÆ SESQUICARBONATIS. L. D. Ammoniæ Carbonatis Aqua, E. Solution of Sesquicarbonate of Ammonia. (*Ammoniæ Sesquicarbonatis* ℥iv., *Aquæ distillatæ* Oj. Dissolve the carbonate of ammonia and strain.)

Prop. and *Use.* The same as that of the sesquicarbonate.

Dose. ♏xxx. to fʒj. in any bland fluid.

AMMŌNIÆ BICARBONAS. D. Bicarbonate of Ammonia, (*Ammoniæ Carbonatis Aquæ, quantum velis.* Expose the solution in a proper apparatus to a stream of carbonic acid gas, procured from white marble dissolving in sulphuric acid, until the alkali be saturated; then let it remain at rest until crystals form, to be dried without heat and preserved in a close vessel

Prop. and *Use.* The same as the sesquicarbonate.

AMMONIÆ HYDROCHLORAS. L. Murias Ammoniæ U S.—E. D. Hydrochlorate of Ammonia. Sal Ammoniac, U S. *Chlorohydrate of Ammonia. Sal Ammoniacus.*

Comp. Hydrochloric acid 9.55, ammonia 31.95, water 18.50 parts; or 1 eq. ammonia=17.15+1 of hydrochloric acid 36.42: equiv.=53.57.

Prop. Inodorous; taste acrid, pungent, bitterish, urinous: 3 pts. of cold water dissolve 1 pt.; usually in the form of a hard, translucent, striated cake; soluble also in 4.5 pts. of alcohol.

Oper. Aperient, diuretic; externally to produce cold during its solution; stimulant.

Use. Seldom used internally; externally while dissolving, to abate the heat and pain of inflammation; to allay head-ache; in lotion, composed of the salt ℥j., alcohol f℥j., water f℥ix to indolent tumors, gangrene, scabies, and chilblains.

Dose. Gr. x. to ʒss.

Incomp. Sulphuric and nitric acids, acetate of lead, potassa, carbonates of soda and potassa, lime.

Off. Prep. *Ammoniæ Sesquicarbonas*, L. E. D. *Liquor Ammoniæ*, L. E. D. *Liquor Sesquicarbonatis Ammoniæ*, L. E. D. *Alcohol Ammoniatum*, E. D. *Ferri Ammonio-Chloridum*, L. E. *Aqua Cupri Ammoniati*, D. *Sulphuretum Ammoniæ*, D. *Murias Ammoniæ et Ferri*, D.

AMMONIÆ LIQUOR FORTIOR, L. Aqua Ammoniæ fortior, E. Stronger solution of ammonia.

Prop. Colorless, strongly pungent. Spec. grav. .882; contains 29 per cent. of ammonia.

Oper. Escharotic, vesicant.

Use. As a rubefacient when combined with oil; as an instantaneous vesicant in gout in the stomach. It is used for preparing *Liq. Ammoniæ*, by adding f℥iij. of distilled water to f℥j. of this solution.

Tests. Should not become turbid with lime water, nor should it precipitate nitrate of silver.

AMMONIÆ SPIRITUS. U.S.—L.E. (*Ammoniæ Hydrochloratis* ℥x., *Potassæ carb.* ℥xvj., Spir. Rect., Aquæ, ā ā Oiij., and distil Oiij.)

Comp. Solution of carbonate of ammonia in rectified spirit.

Prop. Transparent, colorless, pungent, acrid to the taste. Has an alkaline reaction.

Oper. and *Use.* The same as carbonate of ammonia.

Dose. fʒss. to fʒi. in water.

AMMONIĂCUM. U. S.—L. E. Ammoniacum Gummi. D. Ammoniacum. (Dorema *Ammoniacum. Don. in Act. Soc. Linn.* Barbary, Abyssinia?)

Comp. Gum, resin, essential oil; proportions unknown.

Prop. Irregular, dry masses and tears, yellow externally, whitish within; odor peculiar, not ungrateful; taste nauseous, sweet and bitter; forms a white emulsion with water; soluble in vinegar; partially so in alcohol, æther, and solutions of the alkalies.

Oper. Expectorant, deobstruent, antispasmodic, discutient, resolvent.

Use. In asthma and chronic catarrh; visceral obstructions, and obstinate colic from viscid matters lodged in the intestines; externally in scirrhous tumors and white swelling of the joints.

Dose. Gr. x. to ʒss. in pills, with squill, myrrh, &c., or in emulsion; see Mist. Ammoniaci.

Off. Prep. *Mistura Ammoniaci*, L. D. *Pilulæ Scillæ Compositæ*, L. E. *Pilulæ Ipecacuanhæ Comp.*, L. *Emplast. Ammoniaci*, U. S.—L. *Emplast. Gummosum*, E. *Emplast. Ammoniaci cum Hydrargyro*, L.

AMYGDALÆ AMARÆ DULCES. U. S.—L. E. D. Bitter and Sweet Almonds. (Amygdalus communis var. β γ. *Icosand. Monogyn.* N. O. *Amygdaleæ.* Africa. ♄.)

Prop. Taste of β soft and sweet, of γ bitter; kernels of both flat, long, with a brownish powdery cuticle; both yield by expression a sweet bland oil. The bitter is now used for emulsions, and contains hydrocyanic acid; the marc yields oil of bitter almonds.

Oper. Demulcent; the bitter is sedative.

Use. In inflammatory complaints; and as a vehicle for more active remedies.

Off. Prep. *Oleum Amygdalæ*, L. E. D. *Mistura Amygdalæ*, L. E. D. *Emulsio Arabica*, E. D. *Emulsio Camphorata*, E. *Confectio Amygdalæ*, L.

AMYGDALÆ OLEUM. See Oleum Amygdalæ.

AMYGDALÆ PERSICÆ FOLIA. D. Peach Leaves. (Amygdalus Persica. *Icosand. Monogyn.* N.O. *Amygdaleæ.* Persia. ♄.) They contain hydrocyanic acid.

Prop. Taste bitter and aromatic; odor agreeable.

Oper. Sedative.

Use. In inflammatory and spasmodic affections.

AMYLUM. U. S.—L. E. Tritici Farina, D. Starch. (Triticum Hybernum, Wheat. *Triand. Digynia*, N. O. *Graminaceæ*, Italy? ⊙.)

Comp. Oxygen, hydrogen, carbon.

Prop. Inodorous, insipid; in white, friable, hexagonal columnar pieces, emitting a peculiar sound when pressed; insoluble in cold water and alcohol; forming, with boiling water, a strong, opaque, semi-transparent jelly.

Oper. Demulcent, nutritious.

Use. In dysentery, tenesmus, and ulceration of the rectum, in the form of a clyster; it is the common vehicle for exhibiting opium in that form. The *Decoction of Starch* is made by boiling, for a short time, ʒiv. *Starch*, in Oj. *Water*, previously mixing them gradually while the water is cold.

Test. Iodine, when the solution in water is cold.

Off. Prep. *Mucilago Amyli*, E. D. *Pulv. Tragacanthæ Comp.*, L. *Pil. Hydrargyri*, E. *Trochisci Gummosi*, E.

AMYRIDIS GILEADENSIS RESINA LIQUIDA. E. Balsam of Gilead. (Amyris *Gileadensis*. *Octandria Monogyn.* N.O. *Terebintaceæ.* Arabia near Mecca. ♄.) *Balsamum Gileadense.*

Prop. Odor somewhat fragrant; taste warm and bitter, color yellowish, of the consistence of syrup.

Oper. Stimulant, expectorant.

Use. Scarcely ever used.

Dose. ℈j. to ʒj. twice or thrice a day.

ANCHŪSÆ RADIX. D. Alkanet Root. (Anchusa Tinctoria. *Pentand. Monogyn.* N. O. *Boraginaceæ.* Europe. ♃. *Anchusæ radix.*

Prop. Inodorous and insipid when dried. The small roots are the best, and impart the finest and deepest red to oils, ointments, and plasters, for which purpose only they are used.

ANĒTHUM. L. E. Dill Seed. (Anethum *Graveolens*. *Pentand. Digyn.* N. O. *Umbelliferæ.* South of Europe. ⊙.)

Prop. Odor aromatic, but not agreeable; taste aromatic and pungent.

Oper. Stimulant, carminative.

Use. In flatulent colic, and hiccough, particularly of infants.

Dose. Gr. x. to ʒj.

Off. Prep. *Aqua Anethi*, L.

ANGELĬCA ARCHANGELICA, SEMINA. U. S.—E D Angelica Root and Seeds. (*Pentand. Digyn.* N. O. *Umbelliferæ.* Northern Alps. ♂.)

Prop. Odor fragrant; taste aromatic, bitterish, very warm equally in the root, leaves, and seeds.

Oper. Tonic, carminative, sudorific.

Use. In dyspepsia and nausea, but rarely used.

Dose. ʒss. to ʒiij.

ANĪSUM. U S.—L. E. Anisi Semina, D. Aniseed. (Pimpinella. *Anisum.* *Pentand. Digyn.* N. O. *Umbelliferæ* Egypt. ⊙.)

Prop. Odor aromatic; taste sweetish, warm, grateful. Figure oblong ovate.

Oper. Carminative.

Use. In dyspepsia, and the tormina of infants.

Dose. Gr. x. to ʒj. bruised.

Off. Prep. *Oleum Anisi*, U. S.—L. E. D. *Spiritus Anisi*, L.

ANTHĔMIS. U. S.—L. E. Anthemidis Nobilis flores. D. Chamomile Flowers. (Anthemis *Nobilis*, Common Chamomile. *Syngen. Superfl.* N O. *Compositæ.* Indigenous. ♃.) *Chamæmelum, flos simplex.*

Prop Odor powerful, fragrant, grateful; taste bitter, warm; these properties reside in the disc of the flower, and depend on volatile oil, bitter extractive, and piperina.

Oper. Tonic, stomachic; the warm infusion is emetic; externally discutient, emollient, antiperiodic. Time of maceration, 8 to 10 hours.

Use. In intermittents, dyspepsia, hysteria, flatulent colic, gout; to promote he operation of emetics; externally as fomentations in gripings, and to ripen suppurating tumors.

Dose. In powder ʒss. to ʒij. twice or thrice a day.

Off. Prep. *Extractum Anthemidis*, E. D. *Decoctum Anthemidis Nobilis*, U. S.—E. D. *Decoct. Malvæ Comp.*, L. *Infusum Anthemidis*, L.—U. S. *Oleum Anthemidis*, L. *The active constituents are bitter extractive, an essential oil, and piperina.*

ANTIMŌNII OXIDUM. E. Antimonii Oxidum Nitromuriaticum, D. Nitromuriatic Oxide of Antimony. (*Antimonii Sulphureti in pulv. sub.* ℥iv., *Acidi Muriatici* Oj., and *Aquæ* Ov. Dissolve the sulphuret in the acid with the aid of a gentle heat; boil for half an hour; pour the fluid into the water collect the precipitate on a calico filter; wash it well with cold water, then with a weak solution of carbonate of soda, and again with cold water till the water ceases to affect reddened litmus paper. Dry the powder over a vapor bath.

Prop. and *Use.* A sesquioxide, used merely for preparing tartar emetic.

ANTIMONII SESQUISULPHURETUM. L. E. Antimonii Sulphuretum, U. S.—D. Sesquisulphuret of Antimony *Antimonium.*

Comp. Antimony 75.8, sulphur 26.2, in 100 pts.; or 2 eq antimony+3 sulphur=177.3.

Prop. Powder of a black or bluish grey color; insoluble.

Oper. Slightly diaphoretic, alterative.

Use. In chronic rheumatism, scrofula, cutaneous diseases.

Dose. Gr. x. to ʒ ss. after evacuating the stomach and bowels.

Off. Prep. *Sulphuretum Antimonii*, E. D. *Oxydum Antimonii*, E. *Antimonii Oxysulphuretum*, L. *Pulvis Antimonii Compositus*, L. *Oxydum Antimonii*, D. *Antimonii Sulphuretum aureum*, E. D.

ANTIMŌNII OXYSULPHURĒTUM. L. Antimonii Sulphuretum Precipitatum, U. S. Sulphur Antimoniatum Fuscum, D. Antimonii Sulphuretum aureum, E. Oxysulphuret of Antimony. *Sulphur Antimonii Præcipitatum.*

Comp. Sesquioxide of antimony 12.00, sesquisulphuret of antimony 76.5, and 11.5 of water.

Prop. Powder of an orange color, taste scarcely metalline, and styptic; insoluble.

Oper. Emetic, diaphoretic, cathartic, according to the extent of the dose; alterative; used now, only for forming Plummer's pill.

Use. In chronic rheumatism and obstinate eruptions. Seldom ordered.

Dose. Gr. j. to iv. twice or thrice a day, in a pill.

Off. Prep. *Pilulæ Hydrargyri Chloridi comp.*, L.

Test. Totally soluble in hydrochloric acid, emitting fumes of hydrochloric acid.

ANTIMŌNII SULPHURĒTUM PRÆPARATUM. D. Prepared Sulphuret of Antimony. (*Antimonii Sulphureti quantum velis.* Let it be reduced into powder, and treated in the manner ordered for the preparation of chalk.)

Prop. and *Use.* The same as those of the sulphuret.

ANTIMŌNII POTASSIO-TARTRAS. L. Antimonium Tartarizatum, E. Antimonii et Potassæ Tartras, U. S.—D. Potassio-Tartrate of Antimony, or Emetic Tartar.

Comp. 1 eq. tartrate of potassa=113.63+1 sesquitartrate of antimony=219.68=2 water=18: equiv. 351.31.

Prop. Regular form of the crystal, an octahedron; but as it effloresces, generally a white powder; taste styptic and metallic; f℥j. of water, at 60°, dissolve gr. 25, at 212° ʒ iv. It should always be dissolved in distilled water to prove emetic. It is insoluble in alcohol.

Oper. Emetic, sometimes cathartic, diaphoretic, expectorant, alterative, rubefacient. A sedative to the circulation, while it increases most of the secretions.

Use. In the beginning of fever, to clear the stomach and bowels; but it is an improper emetic in advanced stages of typhus; in large doses in pneumatic inflammations; and in small as an alterative in cutaneous diseases, acute rheumatism, chorea;

externally in white swellings, hooping-cough, phthisis, and all deep-seated inflammations.

Dose As the means of subduing inflammation, gr. ss. to gr. ij.; as an emetic, gr. j. to gr. iv. in solution; diaphoretic and expectorant, gr. ⅛ to ½. It is made into an ointment for external use, by rubbing up ʒij. with lard ℥j.

Incomp. Alkalies and earths with their carbonates; strong acids; hydro-sulphurets; lime-water, chloride of calcium, salts of lead; decoctions of bitter and astringent plants.

Off. Prep *Vinum Antimonii Potassio-tartratis*, L. *Vinum Antimoniale*, E. *Vinùm Antimonii*, U. S.

Test. Solubility complete in a moderate quantity of water. Hydro-sulphuric acid, into which one or two of the crystals may be dropped, should form an orange color on them. Neither chloride of barium nor nitrate of silver should cause a precipitate.

APĬI PETRŎSĔLINI RADIX. E. The Root of Parsley. (Apium *Petroselinum.* Common Parsley. *Pentand. Digyn* N. O. *Umbelliferæ.* South of Europe. ♂.)

Prop. Odor, when recent, slightly aromatic; taste sweetish and warm.

Oper. Diuretic, aperient.

Dose. A cupful of the decoction, made with ℥ij. of the sliced root in water Oj. boiled to Oss.

APOCYNUM ANDROSÆMIFOLIUM. U. S. *Dog's Bane* (The Root. *Pentand. Digyn.* N. O. *Apocyneæ*, U. States. Nuttall. Bigelow. ♃.)

Prop. Taste unpleasant and very bitter; contains bitter extractive, caoutchouc, volatile oil, and coloring matter.

Oper. Emetic, diaphoretic, alterative.

Dose. Grs. xxx. of the powdered root as an emetic; grs. v. diaphoretic. Employed by the Indians in lues venerea.

APOCYNUM CANNABINUM. U. S. Indian Hemp. (The Root. *Pent. Digyn.* N. O. *Apocyneæ.* Big. Nuttall. ♃.)

Comp. A bitter principle, extractive, tannin, gallic acid, resin, wax, caoutchouc, fecula, lignin, and a peculiar principle, *Apocynin.*

Prop. Strong odor, nauseous, acrid, bitter taste. Fresh root yields a milky juice resembling caoutchouc. Root yields its virtues to water and alcohol.

Oper. Emetic, hydragogue, cathartic, diuretic, diaphoretic, expectorant, slightly narcotic, and sedative.

Use. A very powerful remedy in ascites and general dropsy.

Dose. From grs. xv. to gr. xxx. of the powdered root produce free vomiting and purging. Of the decoction, which is preferable, and made by boiling ℥ss. of the dried root in Ojss. of water to Oj., from f℥j. to f℥ij. may be given three or four times a day if necessary. Of the extract, grs. iij. to grs. iv. two or three times a day will usually act on the bowels

AQUA. E. Spring Water. Contains about 6000th of solid matter.

AQUA ACIDI CARBONICI. U. S. Carbonic Acid Water. (By means of a forcing pump, throw into a suitable receiver, nearly filled with water, a quantity of carbonic acid (obtained from water by means of sulphuric acid), equal to five times the bulk of the water.)—*U. S. Phar.*

AQUA AMMONIÆ FORTIOR. E. See *Liquor Ammoniæ.*

—— **AMMONIÆ.** E. See *Liquor Ammoniæ.*

—— **AMMONIÆ ACETATIS.** E. See *Liquor Ammoniæ Acetatis.*

—— **ANETHI.** L. Dill Water: properties, &c., the same as those of the seed.

—— **BARYTÆ MURIATIS.** D. Solution of Muriate of Barytes. Vide Solutio *Muriatis Barytæ.*

—— **CALCIS.** E. D. Lime Water. Vide *Liquor Calcis.*

—— **CALCIS COMPOSITA.** D. Compound Lime Water. (*Rasurarum Ligni Guaiaci* lbss. *Glycyrrhizæ radicis incisæ et contusæ,* ℥j. *Corticis sassafras, contusi,* ʒss. *Seminum Coriandri,* ʒvj. *Aquæ Calcis,* mensura lbvj. Macerate without heat for two days, occasionally shaking the closed vessel, and strain.)

For the use and virtues of this very unchemical preparation, see *Decoctum Guaiaci Compositum.*

AQUA CALCIS MURIATIS. D. Solution of *Muriate of Lime* See *Liquor Calcis Chloridi.*

—— **CARBONATIS SODÆ ACIDULA.** D. Acidulous Solution of Carbonated Soda. (*Carbonatis Sodæ quantum velis.*) Dissolve it in the water, so that each pint may contain a drachm of carbonate of soda; then in a proper vessel expose the solution to a stream of carbonic acid gas, extricated from white marble by muriatic acid diluted with six parts of water, until the carbonic acid be in excess in the solution.)

Prop. and *Use.* The same as those of soda water.

AQUA CAMPHORA. Camphor Water. (Take of *Camphor* ʒij., *Alcohol gutt.* xl., *Carbonate Magnesia* ʒj., *Distilled Water* Oij. Rub the camphor first with the alcohol, afterwards with the carb. mag., and lastly with the water gradually added —then filter through paper.)—*U. S. Phar.*

AQUA CARUI. U. S.—L. D. Caraway Water.

—— **CASSIÆ.** E. Cassia Water. (*Cassia Bark bruised* ℥xviij., *Water Cong.* ij., *Rect. Spirit* f℥iij. Distil off a gallon.)

Use. The same as that of cinnamon water.

AQUA CHLORINEI. E. D. Chlorine Water.

Comp. Chlorine and water.

Prop. Odor suffocating; taste harsh, astringent; color pale greenish yellow; spec. grav. 1003; decomposed by light, destroys vegetable colors.

Oper. Stimulant.

Use. In scarlatina maligna.

Dose. fʒj. to fʒij. in a small cupful of fluid

AQUA CINNAMOMI. U. S.—L. E. D. Cinnamon Water (Take of oil of cinnamon fʒss., carbonate magnesia ʒss., distilled water Oij.; rub the oil of cinnamon first with the carb. mag., then with the water gradually added, and filter through paper. In same way prepare the other medicated waters of medicinal plants.)—*U. S. Phar.*

AQUA CUPRI AMMONIATI. D. Vide *Liquor Cupri Ammonio-Sulphatis.*

—— **DISTILLATA.** U. S.—L. E. D. Distilled Water. Although this is very generally ordered in extemporaneous prescriptions, yet it is scarcely ever used; but it is nevertheless absolutely necessary when the following and many other arti

cles are ordered. *Acidum Citricum*, *Antimonii Potassio-Tartras*, *Argenti Nitras*, *Cupri Ammonio-Sulphas*, *Ferri Potassio-Tartras*, *Hydrargyri Bichloridum*, *Liquor Ammoniæ*, *Liquor Plumbi diacetatis*, *Liquor Potassæ*, *Chloridum Barii*, *Plumbi Acetas*, *Vinum Ferri*, *Zinci Sulphas*, *et præparationes variæ.*

AQUA FLORUM AURANTII. L. Orange Flower Water.

AQUA FŒNICŬLI. U. S.—L. E. D. Fennel Water.

—— LAURŎ CERASI. E. D. Laurel Water. (*Fresh Cherry Laurel Leaves* ℔j., *Water* Oijss., *Comp. Spir. of Lavender* ℥j Distil a pint; agitate and filter if milky, and add the spirit.)

Prop. Taste and odor resembling those of bitter almonds, an hydrocyanic acid.

Oper. Sedative.

Use. In spasmodic affections and dyspepsia.

Dose. From ♏x. to fʒi. or more.

AQUA PIMENTÆ. L. E. D. Pimenta Water.

—— MENTHÆ PIPERĬTÆ. U. S.—L. E. D. Peppermint Water.

—— MENTHÆ PULEGĬI. L. E. D. Pennyroyal Water.

—— MENTHÆ VIRĬDIS. U. S.—L. E. D. Mint Water.

—— PĬCIS LIQUIDÆ. D. Tar Water. (*Picis* Oij., *Aquæ Cong.* j.

Comp. Empyreumatic oil, vinegar, water.

Prop. Taste sharp and empyreumatic; color of Madeira wine.

Oper. Stimulant, diuretic.

Use. In scorbutus and cutaneous diseases.

Dose. Oj. to Oij. in the course of a day.

AQUA POTASSÆ. E. See *Liquor Potassæ.*

—— ROSÆ. U. S.—L. E. D. Rose Water.

—— SAMBUCI. L. E. Elder Water.

These waters, which contain a small portion of the essential oil of the plants in solution, are used chiefly as vehicles for more active medicines; in doses of f℥j. to f℥iij.

AQUA SULPHURĒTI POTASSÆ. D. Water of Sulphuretted Potassa. (*A Sulphuretted Hydro-sulphuret of Potassa.*)

Prop. Odor fetid; taste nauseous and acrid; color yellowish; feels soapy, stains the cuticle black; absorbs oxygen from the air, and is decomposed, requiring, therefore, to be kept closely stopped.

Oper. The same as potassii sulphuretum.

Use. In herpes; externally in scabies and porrigo.

Dose. ℥ss. to f℥ij. twice a day.

Incomp. All the acids.

AQUA POTASSÆ EFFERVESCENS. E. Effervescing Solution of Potassa. (*Aquæ Cong.* j., *Potassæ Carbonatis* ℥j, *in Nooth's Apparatus.*)

Comp. Bicarbonate of potassa, uncombined carbonic acid, and water.

Prop. Taste pungent, acidulous; transparent, sparkling.

Oper Diuretic, antacid.

Use. In dyspepsia and red gravel.

Dose. f℥viij. three times a day.

AQUA SODÆ EFFERVESCENS. E. Carbonatis Sodæ Aqua Acidula. D. Effervescing Solution of Soda. Soda Water. (*Aquæ Cong. Sodæ Carbonatis* ℥ij., *saturated in Nooth's Apparatus.*)

Comp As above, with the bicarbonate of soda instead of potassa

Prop. As above, but more pleasant and milder.

Oper. Tonic, lithontriptic, diuretic, antacid.

Use. In red gravel, dyspepsia, and as a cooling beverage; with lemon-juice, a good effervescing draught.

Dose. Oss. to Oj. twice or thrice a day.

Mr. Brande's experiments have raised doubts whether the alkalies, in any form, act as solvents of ready-formed calculous matter.

ARALIA NUDICAULIS. U. S. *Secondary.* False Sarsaparilla. (*Pent. Pentagyn.* N. O. *Araliaceæ.* U. S. ♃.)

Prop. Root horizontal, creeping, twisted, yellowish-brown color, fragrant odor, warm, aromatic, sweetish taste.

Oper. Stimulant, diaphoretic, alterative.

Use. Employed in rheumatism, syphilis, cutaneous affections in the same manner and dose as the genuine sarsaparilla.

ARALIA SPINOSA. U. S. Angelica Tree, (Toothache Tree, Prickly Ash. Cl. and Or. same as former. ♃.)

Prop. Bark thin, greyish externally, white within, aromatic odor; bitterish, pungent, acrid taste; soluble in boiling water.

Oper. Stimulant, diaphoretic, emetic, cathartic.

Use. Employed in chronic rheumatism and cutaneous eruptions. Also, in Virginia, in colic, in toothache, usually given in decoction.

ARCTII LAPPÆ SEMINA ET RADIX. D. Burdock Root (Arctium Lappa, U. S. Burdock, *Syngen. Polygam. Æqualis* N. O. *Compositæ.* Indigenous. ♃.)

Prop. Inodorous, taste sweetish, slightly bitter, mucilaginous.

Oper. Aperient, sudorific, diuretic.

Use. In rheumatism, gout, aphthæ; also in venereal, scorbutic, scrofulous, and nephritic affections; in decoction made with ℥ ij. of the root in Ojss. of water. The leaves externally in cutaneous eruptions and ulcerations.

Dose. A teacupful several times a day; of little value unless persevered in for a long time.

ARGENTUM. U S.—L. E. D. Silver: used only to prepare the Nitrate.

ARGENTI NITRATIS CRYSTALLI. D. Crystals of Nitrate of Silver. (Argenti in laminas extensi atque concisi *partes triginta septem*, acidi nitrici diluti *partes sexaginta.* Let the silver be put into a glass vessel, and the acid previously diluted with water poured over it. Dissolve the metal, with heat gradually increased; then crystallize by evaporation and cooling, and preserve the crystals, dried without heat, in a glass vessel in an obscure place.)

Comp. Oxide of silver 68.24, nitric acid 31.76, in 100 parts; or 1 eq. acid=54.15+1 oxide of silver=116 eq.=170.15.

Prop. Taste intensely bitter and metallic; crystals transparent, brilliant, irregular thin plates, not deliquescent, but becoming brown, the silver being partly reduced, when exposed to vegetable or animal matter. Soluble in an equal weight of water at 60°, and in alcohol.

Oper. Tonic, antispasmodic, escharotic.

Use. In chorea and epilepsy; externally to cicatrize ulcers; as an application to erysipelas; and as a gargle in ulcerations of the fauces.

Dose. Gr. 1-6th to gr [illegible] or more, in a pill with crumb of bread

Incomp. Alkalies, alkaline earths; sulphuric, hydro-sulphuric, sulphurous, hydrochloric, phosphoric acids, and their salts spring water.

ARGENTI NITRAS. (*fusa?*) U.S.—L.E.D. Nitrate of Silver.

Comp. 1 eq. of oxide of silver=116+1 of nitric acid=54.15, eq. =170.15; or 68.24 parts of oxide+31.76 of acid=100.00.

Prop. Taste styptic, austere, bitter; decomposes animal matter. In little cylindrical pieces of a dull-white color; fracture radiated; reduced by light; soluble in an equal weight of water at 60°, also in alcohol.

Oper. Tonic, antispasmodic, escharotic.

Use. In chorea, epilepsy, dyspepsia, and irritable conditions of the mucous membrane of the stomach and bowels; locally to relieve strictures; to fungous ulcers, warts, and venereal chancres, gr. ij. in distilled water f℥j. is a good injection in fistulous sores; and as an application to spongy gums, enlarged tonsils, and ulcerated sore throats. A solution of ʒ ss. in f℥j. of distilled water, highly useful when pencilled over the surface in erysipelas.

Dose. Gr. ⅛ increased to gr. iv. in a pill, with crumb of bread, three times a day; or in solution, increased to gr. iij. The dark color communicated to the skin of some individuals is an objection to its external employment, but this is prevented by the administration of diluted nitric acid or chlorine.

Off. Prep. *Liquor Nitratis Argenti*, L. *Argenti Cyanidum*, L.

Incomp. Sulphuric, hydrochloric, and arsenious acids and their salts; alkalies, except ammonia; lime; chlorides; sulphurets; astringent vegetable infusions and decoctions; aqueous solutions of salts of mercury, or of copper.

ARGENTI CYANIDUM. L. Argenti Cyanuretum, U. S. *Cyanuret of Silver*. Cyanide of silver. *Argenti Nit.* ʒ xvii. *Acidi Hydrocyanici diluti, Aq. dist.*, ā ā Oj. (The U. S. Ph. directs to take *Nitrate of Silver* ʒ xv., *Hydrocyanic Acid, Dist. Water*, ā ā Oj. Having dissolved the nitrate of silver in the water, add the hydrocyanic acid and mix them. Wash the precipitate with distilled water and dry it.)

Comp. 18.4 cyanogen=80.6 silver=100; or cyanogen 1 eq.=26.39 +silver 1 eq.=1.08 eq.=134.39.

Prep White powder, insoluble in water, soluble in ammonia, and hot nitric and sulphuric acids.

Tests. Nitric acid dissolves the whole of the residue, after the cyanogen has been driven off by heat.

Use. To prepare hydrocyanic acid.

ARGILLA PURA Pure Argil or Alumina. Armenian Bole. (Take the Sulphate of Alumina and Ammonia, and expose it for 20 or 25 minutes to a red heat, in a crucible; the sulphuric acid and ammonia are driven off, and the argil remains behind in a white powder.)

Prop. A white powder, devoid of smell or taste, astringent; a peculiar earthy smell when breathed upon. Insoluble in water, attracts moisture greedily from the air, becoming a gelatinous mass.

Oper. Absorbent, astringent.

Use. In diarrhœa, cholera infantum, and dysentery, attended with acidity of stomach.

Dose. For a young child ʒss. to ʒj., to adults ʒij. to ʒiv in an emulsion.

ARMORACÍA. U S.—L. Cochlearia Armoraciæ Radix, E. D Horse Radish Root. (Cochlearia *Armoracia*, Horse Radish *Tetradynamia Siliculosa*. N. O. *Cruciferæ*. Europe. ♃.)

Prop. Odor pungent; taste sweetish biting, acrid; lost in drying

Oper. Stimulant, diuretic, diaphoretic.

Use. In scorbutus, rheumatism, dropsy, and dyspeptic affections and locally in hoarseness.

Dose. ℈i. to ʒj. Vide Infusion: of the following syrup a teaspoonful often, slowly swallowed, in hoarseness. (℞ Of the scraped root ʒj., boiling water ℥ij., sugar *q. s.* to the strained liquor.)

Off. Prep. *Infusum Armoraciæ Comp.*, L. *Spir. Armoraciæ Comp.*, L. D.

ARNICÆ MONTĀNÆ FLORES, FOLIA, RADIX. D.—U.S. The Flowers, Leaves, and Root of Leopard's Bane. (Arnica *Montana*, *Secondary*. *Syngen. Polygam. Superfl.* N. O. *Compositæ*. North of Europe. ♃.)

Prop. Odor slightly fetid; when rubbed aromatic, exciting sneezing; taste bitterish, acrid.

Oper. Narcotic, stimulant, diaphoretic, emmenagogue, diuretic

Use. In amaurosis, paralysis, rheumatism, gout, dropsy, nephritis, and chlorosis. The root has been used in intermittents, but is most useful in diseases attended with a typhoid state of the system.

Dose. Gr. v. to gr. x. in powder, or f℥ss. of the following infusion (℞ Of the root ʒss., water f℥ viij.), twice or thrice a day. In large doses it produces poisoning.

Tests. The infusion is colored green by sulphate of copper.

ARSENIAS AMMONIÆ. *Ammonium Arsenicum.* Arseniate of Ammonia. (Take of *arsenious acid* one part, dissolve in *water*, and add *pure* or *carbonated ammonia* sufficient to saturate the acid; or, take of *white arsenic* one part, *nitric acid* four parts, *muriatic acid* half a part, saturate the solution with carbonate of ammonia, and let the arsenical salt crystallize; —*Dunglison's* "*New Remedies*."

Oper. Alterative, and similar to *Fowler's Solution* of arsenic.

Use. In chronic cutaneous affections; must be given for severa weeks.

Dose. Of a solution, made by dissolving gr. i. of the salt in ℥j of water; give from xx. to xxv. drops daily, increasing the dose gradually till it reaches ʒj.

ARSENÍCUM ALBUM SUBLIMATUM. D. Arsenicum Album. E. Acidum Arseniosum. L. Sublimed with white Arsenic. Arsenious acid.

Comp. Arsenic, *the metal*, 75.2, oxygen 24.8 parts; or 2 eq. arsenic $=75.4+3$ oxygen$=24$—equiv.$=99.4$.

Prop. In white, semivitreous, brittle lumps; some transparent, others opaque; odor, when heated with charcoal, that of garlic; taste sweetish. When heated with charcoal in a close glass tube, it sublimes in brilliant metallic scales, by which it may be detected when suspected as the cause of death. Its solution reddens litmus; spec. grav. 3.7; 1000 parts of water at 212° dissolve 37 parts, and retain 18, when cold, of the transparent acid; 115 of the opaque, and retain 29. The solution combines with alkalies.

Oper. Tonic, escharotic. The most virulent of the mineral poisons, for which the *hydrated peroxide* of iron is the best antidote.

Use. In intermittents, periodic headaches, and chronic rheumatisms. An application to cancerous sores, in lotion. (℞ Acidi arseniosi, carbonatis potassæ, ā ā gr. viij., aquæ f℥ iv.; or, in ointment, ℞ Acidi arseniosi ʒ j., ung. cetacei ʒ xij.)

Dose. In solution, vide Liquor potassæ arsenitis; or gr. 1-10th to gr. ¼ in a pill. (℞ Arseniosi acidi gr. j., sacchari albi gr. x., micæ panis gr. x. Tere saccharum cum acido, dein cum pane optimo contunde, et in pilul. æqual. decem divide.)

Off. Prep. *Liquor Potassæ Arsenitis*, U. S.—L.

ARSENICUM IODATUM. Iodide of Arsenic. (Heat in a glass alembic a mixture of 16 parts of arsenic and 100 parts of iodine; or, boil 30 parts powdered arsenic and 100 of iodine, in 1000 parts of water. As soon as the liquor becomes colorless, filter and evaporate to dryness.)—*Majendie.*

Prop. Orange-colored needles.

Oper. Sedative, alterative.

Use. In cutaneous affections, both internally and externally.

Dose. One-tenth of a grain three times a day, increased to one-fourth of a grain. The ointment may be made, according to Cazenave, by mixing 1 part of the iodide with 18 of lard; but Biett uses only gr. iij. of the iodide to ℥ j. lard.

ARTEMISIA CHINENSIS, et A. INDICA, FOLIA, MOXA The Leaves of the Chinese and Indian Wormwood. Moxa (*Syngen. Superflu.* N. O. *Compositæ.* China and India. ♃.) *The Moxa is prepared by beating the tops of these plants in a mortar until they become like tow. The A. Vulgaris will answer.*

Prop. *Leaves*—odor fragrant, taste bitter. *Moxa* soft like cotton wool.

Oper. *Leaves*—Stomachic, tonic, antispasmodic.

Use. The *leaves* in dyspepsia, hysteria, and obstructed menstruation. The *Moxa*, burnt upon a part, relieves rheumatic pains, and other local affections requiring counter-irritation.

Dose. A cupful of an infusion, made with ʒ iv. of the leaves in f℥ viii. of boiling water.

ARTEMISIA SANTONICA. SEMINA. D. Tartarian Southern-Wood Tops.

Comp. A volatile oil, resinous extractive matter, and a peculiar principle, *santonin*, crystallizable, colorless, tasteless, inodorous soluble in æther and alcohol, and nearly insoluble in water.

Prop. Smell strong and disagreeable; taste bitter.

Oper. Stimulant, anthelmintic.

Use. In the lumbrici of children, but much is to be ascribed to the calomel, jalap, &c., administered at the same time.

Dose. Gr. x. to ʒ j. in powder, or made into an electuary with honey, twice a day. Superseded in this country by the seeds of the *Chenopodium Anthelminticum*.

ARUM. U. S. *Secondary.* (Triphyllum.) Dragon Root, Indian Turnip. (*Monœcia. Polyandria.* N. O. *Aroideæ.* United States. The Root. ☉.)

Prop. Odor peculiar, taste highly acrid and burning, contains large quantity of starch.

Oper. Externally irritant. Internally, stimulant to all the secretions, especially those of the skin and lungs.

Use. In asthma, pertussis, chronic catarrh, chronic rheumatism, and cachectic complaints generally.

Dose. Of the powder of the recently dried root, gr. v. to gr. x., mixed with gum arabic, sugar, and water, in the form of emulsion, repeated two or three times a day, and gradually increased to ʒss. or ʒj. Also, in aphthous sore mouth of children, mixed with sugar, and laid on the tongue.

ASARUM. L. ASĂRI FOLĬA. D. The Leaves of Asara Bacca. (Asarum *Europeum*. *Dodecandria Monogyn*. N. O. *Aristolochiaceæ*. Europe. ♃.)

Prop. Almost inodorous; taste nauseous, bitter, hot, acrid; loses much of its acrimony in drying.

Oper Emetic, cathartic, diuretic, diaphoretic, errhine.

Use. Scarcely ever used but as an errhine in cephalæa and chronic ophthalmia.

Dose. ℈j. to ʒss. vomits and purges; gr. ij. to gr. v. snuffed up the nostrils at bed time, occasion a plentiful mucous discharge.

ASARUM CANADENSE. U. S. (*Secondary*. Wild Ginger U. States. ⊙.)

Prop. Taste pleasant, aromatic, slightly bitter, resembling that of cardamom; contains an essential oil, bitter, resinous matter, starch, and gum.

Oper. A stimulant, tonic, diaphoretic

Use. Used chiefly as an elegant adjunct to tonic infusions and decoctions. Resembles serpentaria in its effects.

Dose. Of the powder, from gr. xx. to gr. xxx. Also used in form of a tincture.

ASCLEPIAS. U. S. *Incarnata*, *Syriaca*, *Tuberosa*. (*Secondary.*) Syria. The Common Silkweed. *Tuber.* Butterfly Weed. Pleurisy Root. *Pentan. Digyn.* N. O. *Asclepiadeæ.* Bigelow. U. States. ⊙.)

Prop. The variety *Tuberosa* is chiefly employed in medicine. Taste subacrid, nauseous, bitter; emits no milky juice when wounded, like the other varieties.

Oper. Diaphoretic, expectorant, cathartic, diuretic, slightly tonic.

Use. Employed extensively in some of the Southern States, in catarrh, pneumonia, pleurisy, consumption, acute rheumatism, autumnal remittents, and dysentery.

Dose. Of the powder, gr. xx. to ʒi. several times a day. As a diaphoretic, a teacupful of the decoction, every three or four hours, made by infusing ℥i. of the root in Oij. water.

ASPARAGUS OFFICINALIS. Asparagus. Europe. ♃.

Prop. Juice contains a peculiar crystallizable principle called *asparagin*, or *asparamide*.

Oper. Diuretic, aperient, deobstruent, sedative?

Use. Dropsy, cutaneous affections, neuralgia, palpitation, &c. diseases of the heart.

Dose. Of the syrup, made by adding a sufficient quantity of sugar to the expressed juice of the shoots, previously deprived of its albumen by exposure to heat and by filtration, from f℥j. to f℥ij. Of the extract, made by evaporating the same juice to the proper consistence, from ʒss. to ʒj.; or it may be prepared from the inner, white portion of the roots.

ASPHALTUM. (See *Naptha.*)

ASPIDIUM L. See Filicis Radix.

ASSAFŒTĬDA. U. S.—L. E. Assafœtidæ Gummi Resina. D. Assafœtida. (Ferula *Assafœtida. Pentand. Digyn.* N. O. *Umbelliferæ.* Persia. ♃.)

Comp. Gum 60, resin 30, essential oil 10 parts in 100.

Prop. In masses, of a whitish or reddish, and violet hue, adhering together; odor fetid and alliaceous; taste bitter and subacrid; forms an emulsion with water.

Oper. Antispasmodic, expectorant; emmenagogue; anthelmintic when injected into the rectum.

Use. Hysteria, tympanitis, asthma, dyspnœa, pertussis, worms.

Dose. In pill, gr. x. to ʒss.; in solution, vide *Mistura;* in clyster, ʒij dissolved in water f℥viij.

Off. Prep. *Mistura Assafœtidæ,* U. S.—L. D. *Tinct. Assafœtidæ,* U. S.—L. E. D. *Spiritus Ammoniæ Fœtidus,* L. E. D. *Tinct. Castorei Ammoniata,* E. *Pilulæ Assafœtidæ,* U. S.—E. *Pilulæ Aloes et Assafœtidæ,* U. S.—E. *Pil. Galbani Comp.,* L.

ATROPA. (See *Belladonna.*)

AURANTIUM. AURANTĬI CORTEX. U. S.—**AURANTĬI FLORES.** L. Aurantii aqua, Cortex. E. Citri Aur. fructus succus, tunica exterior, flores, folia, D. The Seville Orange and its rind, flowers, leaves, and immature fruit. (Citrus *Aurantium. Polyadel. Icosand.* N. O. *Aurantiaceæ.* Asia. ♃.)

Prop. Juice gratefully acid; rind aromatic, bitter; unripe fruit more bitter, but less aromatic; flowers agreeably odorous.

Oper. Juice refrigerant, antiseptic; the rind and immature fruit tonic, carminative.

Use. The juice, in febrile, inflammatory complaints, and scurvy, as a beverage; the rind and immature fruit in dyspepsia, particularly that of drunkards; the latter is also used in issues, and the juice as a lotion, and the pulp as a poultice to fetid sores.

Dose. Juice ad libitum: of the rind, &c., vide Off. Preparations.

Off. Prep. Of the rind, *Aq. Citri Aurantii,* E. D. *Confectio Aurantii,* U. S.—L. E. D. *Syrupus Aurantii,* U. S.—L. E. D *Infusum Aurantii Comp.,* L. E. *Infus. Gentianæ Comp.,* U. S. —L. E D. *Tinct. Aurantii,* L. E. D. *T. Cinchonæ Comp.,* U. S. *Tinct. Gentianæ Comp.,* U. S.—L. E. *Spiritus Armoraciæ Comp.,* L. D. Of the flowers, *Aquæ Florum Aurantii,* L.

AURANTĬI AQUA. E. Orange-flower water.

Use. As a vehicle for other substances.

AURANTĬI OLEUM. L. E. Oil of the Orange. (*Distilled from the flowers.*)

Prop. Volatile, has the odor of the flowers, a pungent taste.

AURI IODIDUM Iodide of Gold. (Add a solution of pure cyanide of potassium to a solution of chloride of gold, collecting the iodide of gold, which falls down, on a filter, and washing it with alcohol to remove the excess of iodine, which precipitates with it.)—*French Codex.*

Comp. 1 eq. iodine=126; 1 eq. gold=200.

Prop. Greenish yellow color; insoluble in cold water; slightly soluble in boiling water. Heated in a crucible it evolves iodine vapor, and is converted into metallic gold.

Oper. Alterative, tonic.

Use. In venereal affections, cutaneous diseases, &c.

Dose. 1-15th to 1-10th of a grain.

AURUM MURIATICUM. Auri Terchloridum. Aurum Chloratum. Murias Auri. Muriate of Gold. Terchloride of Gold. (Digest one part of gold leaf in three parts of the nitro-hydrochloric acid in a sand bath, and evaporate gently to dryness.)—*French Codex.*

Prop. Taste styptic, disagreeable; soluble in alcohol, æther, and water, forming a solution of a beautiful yellow; occurs in small crystalline needles of an orange-red color. Exposed to a moderate heat, it passes to a state of protochloride; heated to a greater degree, chlorine is disengaged, and metallic gold left behind.

Comp. 1 eq. gold—200 + 3 eqs. chlorine 108.

Oper. A corrosive poison; resembles corrosive sublimate in its operation; an alterative.

Use. Externally and internally, in dropsy, secondary syphilis, and glandular affections; as a caustic in cancerous growths.

Dose. From 1-20th to 1-15th of a grain, twice a day. Must be used with great caution.

AURUM MURIATICUM NATRONATUM. Sodii Auro-Terchloridum. Chloride of Gold and Sodium. Muriate of Gold and Soda. (Take of *gold* six parts, dissolve in a sufficient quantity of *nitro-muriatic acid*, adding as much *nitric acid* as is required to dissolve the gold; then mix ten parts of dry *muriate of soda*, and after evaporating the solution over a slow fire, reduce it to a yellow powder.)—*Pruss. Pharm.*

Prop. Crystallizes in four-sided prisms; beautiful yellow color; attracts moisture from the air; soluble in water.

Comp. 1 eq. terchloride of gold—308; 1 eq. chloride of sodium [illegible], and 4 eqs. of water—36.

Oper. An alterative.

Use. In secondary syphilis, and cutaneous affections; most employed of the auric preparations.

Dose. From [illegible] to 1-20th of a grain, twice a day, rubbed up in [illegible]; as ointment, gr. i. to gr. xxxvi. lard.

AURUM NITRICO-MURIATICUM. Auri Nitro-Murias. Nitro-Muriate of Gold. (Dissolve gr. vi. of pure muriate of gold in [illegible] nitro-muriatic acid.)—*Recamier.*

Oper. [illegible] solvent.

Use. [illegible] tumors and ulcers.

Appl. [illegible] applied cautiously to the diseased parts, and [illegible]. The pain from its application may be [illegible] pledgets dipped in laudanum.

AURUM OXYDATUM. Auri Teroxydum. Teroxide of Gold. [illegible] Auric Acid. (The French Codex directs to [illegible] by boiling four parts of calcined magnesia with one part of muriate of gold, and forty parts of water. Then [illegible] water to remove the chloride of magnesium, [illegible] dilute nitric acid to dissolve the excess of [illegible]

[illegible] other preparations of gold; its uses also [illegible] pills with extract of mezereon, and [illegible] of a grain to a grain.

AURUM CYANATUM. Tercyanide of Gold. (Add carefully a solution of pure cyanide of potassium to a solution of chloride of gold until a precipitate (cyanide of gold) ceases to be formed.) —*French Codex.*

Comp. 3 eqs. cyanogen=78; 1 eq. gold=200.

Prop. A yellow powder, insoluble in water.

Oper. Alterative.

Use. In venereal, scrofulous, and cutaneous affections.

Dose. 1-15th to 1-10th of a grain, in pills, with some inert powder.

AVĒNA. L. E. Avenæ farina ex seminibus. D. Oats. (Avena *Sativa. Triand. Digyn.* N. O. *Graminaceæ.* Isle of Juan Fernandez. ☉.)

Comp. In 100 parts, 59 starch, 4.30 gluten, 8.25 sugar and bitter principle, 2.50 gum, 2 fixed oil, 23.95 fibrous or woody matter; has no smell; slightly bitter to the taste, and yields most of its nutritive matter with facility to boiling water.

Oper. Nutritive, emollient.

Use. The decoction of oats is excellent as a beverage in all acute diseases; and as a clyster in dysentery. The dry meal is sprinkled over parts affected with erysipelatous inflammation: boiled in water, it forms a good common poultice; and, with yeast, the fermenting poultice, for gangrenous sores.

To make oat-meal gruel, boil an ounce of the meal with three pints of water to a quart; strain the decoction; allow it to stand till it cools; then pour off the clear liquor; add sugar and lemon juice to improve its flavor: raisins may also be boiled in it for the same purpose.

AXUNGIA. E. Lard. See *Adeps.*

BALSĂMUM CANADENSE. E. D. See Terebinthina Canadensis.

BALSĂMUM PERUVIANUM. L. E. D. Myroxili Peruviani Balsamum, E. D. Peruvian Balsam. (Myrospermum *Peruiferum, Decand. Monogyn.* N. O. *Leguminosæ.* South America. ♄.)

Comp. Benzoic acid, resin, volatile oil.

Prop. Odor fragrant and aromatic, taste hot and bitter, consistence that of honey, color reddish-brown, soluble in alcohol miscible in water by means of mucilage.

Oper. Stimulant, tonic, expectorant.

Use. In palsy; chronic asthma, bronchitis, and rheumatism; gleet; leucorrhœa; and externally for cleansing and stimulating foul, indolent ulcers; ℈j. with fellis Bovini ℥iij., forms a mixture which is dropped into the ear in cases of a fetid discharge from that organ, every day after syringing with a solution of mild soap.

Dose. ♏x. to f℈ss. twice or thrice a day, made into an emulsion with mucilage of gum.

Off. Prep. Pilulæ Guaiaci cum Aloe, D.

BALSAMUM TOLUTĀNUM. L. E. Toluifera Balsamum Resina, D. Tolu Balsam. (*The concrete balsam of* Myrospermum *Peruiferum.*)

Comp. The same as that of Balsam of Peru.

Prop. Odor very fragrant; taste warm, sweetish, communicated to boiling water; color reddish-yellow.

Oper. Stimulant, expectorant?

Use. In chronic coughs, but principally used on account of its flavor.

Dose. Gr. x. to ʒ ss. triturated with mucilage.

Off. Prep. *Tinct. Benzoini Comp.*, L. E. D. *Tinct. Tolutani*, E. D. *Syrupus Tolutani*, L. E.

BARIUM IODATUM. Baryi Iodidum. Iodide of Barium.

BARYTA HYDRIODICA. Hydriodate of Baryta. (For the methods of preparing these, see Dunglison's "New Remedies," pp. 82, 83.)

Oper. Alterative.

Use. Scrofula, morbid growths, hypertrophy, chronic inflammations, secondary syphilis, cutaneous diseases, &c.

Dose. ⅛ to 1-6 of a grain three times a day, gradually increasing the dose to 2 or 3 grains.

BARYTÆ CARBONAS. U. S. See Carbonas Barytæ.

——— SULPHAS. D. For making the carbonate, and the chloride of Barium.

BARII CHLORIDUM. U. S.—L. See Murias Barytæ.

BECCABUNGÆ HERBA. D. Brooklime. (Veronica *Beccabunga*, *Diand. Monogyn.* N. O. *Veroniceæ.* Indigenous. ♃.)

Prop. Inodorous; taste bitterish, slightly styptic.

Oper. Antiscorbutic?

Use. In scurvy, but has very little efficacy.

Dose. f℥ij. to ℥iv. of the juice daily.

BELLADONNA. U. S.—L. E. Folia et Radix, D. The Leaves and Root of Deadly Nightshade. (Atropa *Belladonna. Pentand. Monogyn.* N. O. *Solanaceæ.* Indigenous. ♃.)

Comp. Albumen, salts of potash, and a narcotic principle, which is an alkali that has been named *Atropia*, discovered by Messrs. *Meissner* and *Brandes*, in Germany: its crystals are acicular, white, shining, tasteless, and scarcely soluble in water.

Prop. Odor slightly narcotic, taste subacrid, bitter, nauseous; does not lose its activity by drying.

Oper. Powerfully narcotic, diaphoretic, diuretic, repellent.

Use. In obstinate intermittents, tic douloureux, palsy, epilepsy, chorea, mania, gout, rheumatism, dropsy, jaundice, pertussis, and the cachexiæ; amaurosis: sprinkling the powdered leaves over cancerous sores has been found to allay the pain; and the leaves form a good poultice. Applied to the eye, in the form of infusion or solution of the extract, to dilate the pupil previous to operations. The root is used for the same purpose as the leaves.

Dose. Gr. ss. gradually increased to gr. x. daily, or f℥ij. of this infusion, ℞ Of the leaves ℈j., hot water f℥x., strained cold

Off. Prep. *Ext. Belladonnæ*, L. E.

BENNIE. (See Sessamum.)

BENZOINUM. U. S.—L. E. Benzoe, D. Benzoin. (Styrax *Benzoin*, *Decand. Monogyn.* N. O. *Styraceæ.* Sumatra. ♄.)

Comp. Benzoic acid, resin.

Prop. Odor fragrant, taste slightly aromatic; in masses composed of white and brown pieces; volatile; soluble in alcohol and æther.

Use. Principally for obtaining the acid it contains.

Dose. Gr. x. to ʒ ss.

Incomp. Alkalies, acids:—and so with all the balsams.

Off. Prep. *Acidum Benzoicum*, L. E. D. *Tinct. Benzoini Comp.* L. E. D.

BERGAMII OLEUM. L. Bergamotæ oleum E. Oil of Bergamotte. A volatile oil, distilled from the rind of the fruit of the Citrus *Limetta Bergamium.*

Use. For scenting ointments.

BISMUTHUM. U. S.—L. E. D. Bismuth.

Prop. In spicular plates of a reddish-white color, considerable lustre, pulverizable, moderately hard; spec. grav. 8.211: fusible at 400° Fah.; volatile in a high temperature. It has a sensible odor and taste.

Use. For preparing the trisnitrate.

BISMUTHI TRISNITRAS. L. Bismuthi Subnitras. U. S.—D. Bismuthum album. E. Trisnitrate of Bismuth. (℞ *Bismuthi* ℥j., *Acidi Nitrici* f℥jss., *Aquæ Distillatæ* Oiij. Dissolve the bismuth in the nitric acid, mixed with fʒvj. of the water; and strain. Add the remainder of the water to the filtered fluid, and set aside the mixture till the powder subsides. Finally, having poured off the supernatant fluid, and washed the trisnitrate with distilled water, dry it, rolled in blotting paper, with a gentle heat.)

Comp. 18.36 pts. of nitric acid + 81.64 of oxide of bismuth = 100.00; or, 3 eq. oxide = 240 + 1 eq. acid = 54.15 equiv. 294.15.

Prop. A white, inodorous, tasteless powder: insoluble in water.

Oper. Tonic, antispasmodic.

Use. In dyspepsia attended with cardialgia.

Dose. From gr. j. to gr. xv.

BORAX. L. E. Sodæ Boras, U. S.—D. (Impure from Thibet and Persia.) Borax. A Biborate. Exists native, and may be obtained by artificial means.

Comp. 2 eq. of boracic acid = 69.8 + 1 of soda 31.3 + 10 water = 90 equiv. = 190.11.

Prop. Inodorous, taste cooling, slightly efflorescent; soluble in water. A concentrated solution treated with sulphuric acid deposits scaly crystals in cooling.

Oper. Diuretic, detergent, refrigerant.

Use. In aphthous affections it is administered internally; and also in gastric irritation. As a gargle in aphthæ, and in salivation. In nephritic and calculous complaints depending on an excess of uric acid. Externally as a wash in scaly cutaneous eruptions.

Dose. Gr. x. to ʒj.; lotion ʒj to ℥viij. water.

Off. Prep. *Mel Boracis*, L. E.

BRAYERA ANTHELMINTICA. Brayera. (*Icosand. Digyn.* N. O. *Rosaceæ.* The Flowers. ♃.) Abyssinia.

Comp. Extractive matter, tannin, &c.

Oper. Powerful anthelmintic.

Use. For tape worm.

Dose. ℥j of the flowers boiled in xvi. of water to ℥viij.; add ugar or honey to make it palatable, and swallow at one raught. Not yet employed in the United States.

OMINIUM. U. S.—L. (*Secondary.*) Brome.

p. A dark orange-red volatile liquid; odor disagreeable, resembling that of chlorine; taste strongly acrid; spec. grav. 3 ry volatile; soluble in water, alcohol, and æther; found in water mineral waters, and marine animals.

Oper. A powerful poison, escharotic.

Use. To prepare bromide of Potassium. In some cases as Iodine but possesses more activity. Same cases as Iodine—bronchocele, scrofula, amenorrhœa, chronic cutaneous affections, and hypertrophy of the ventricles.

Dose. Five or six drops of a solution, made by dissolving 1 part of bromine in 40 of water, by weight.

Off. Prep. *Potassii Bromidum.*

BRUCINA. Brucine. An alkaloid obtained from the bark of the false Angustura (*Brucea Antidysenterica*), also found in Nux Vomica and St. Ignatius's Bean.

Prop. Crystals of a white color, oblique prisms, pearly lustre, bitter taste, soluble in 500 parts boiling water, and 850 parts cold; soluble in alcohol; melts at a temperature a little above that of boiling water, forms neutral salts with the acids.

Oper. Similar to that of strychnine; weaker, however, in the ratio of 1 to 15; 4 grs. brucine will kill a rabbit, while ½ gr. of strychnine is sufficient. A stimulant to the muscular and nervous system.

Use. In paralysis, and atrophy of the limbs; loss of sensation.

Dose. From gr. ss. gradually increased to gr. v. in 24 hours, in the form of pill. Of the tincture, made by dissolving 18 grains brucine in ℥j. alcohol, from 6 to 20 drops. Of the mixture made by adding gr. vj. brucine to ℥iv. water and ʒij. sugar ℥ss. night and morning.

BUCKU. E. See Diosma *Crenata.*

CAINCÆ RADIX. Cainca Root. (*Pentandria, Monogynia.* N. O. *Rubiaceæ.* ♄. Brazil.) *Chiococa Anguifuga.* The bark of the root.

Comp. 1. A bitter principle, crystallizable in small, white, silky, shining needles, inodorous, and soluble in hot alcohol. 2. A fatty, green substance. 3. Yellow coloring matter. 4. A viscid coloring matter.

Prop. The root is of the size of the finger, round and knotty surface smooth, or irregularly wrinkled, wood tough, and of a whitish color; smell of the fresh root disagreeable; taste at first like that of coffee, afterwards nauseous and pungent. Bark alone efficacious.

Oper. Diuretic, hydragogue, cathartic, emmenagogue, resolvent.

Use. In dropsy, worms, obstructed menstruation, rheumatism, catarrh of the bladder.

Dose. Of the powder, from ℈j. to ʒss. in 24 hours. Of the decoction, ʒj. to ʒiij. a day. Of the extract, 20 to 30 grs. in the same time. Of the tincture, ʒj. to ʒij. The decoction is made by boiling ʒij. of the root in Ojss. of water to one half, and strain, of which a tablespoonful is given three times a day. The alcoholic extract is considered one of the best forms of administering it.

CAJUPUTI. L. Cajuputi Oleum. U. S.—E. Cajeput Oil. (Melaleuca *Minor, Polyadel. Icosand.* N. O. *Myrtaceæ.* Amboyna. ♄.)

Prop. Odor strong, fragrant, somewhat like camphor; taste pungent, aromatic; limpid; color green; when rectified, colorless.

Oper Stimulant, antispasmodic, diaphoretic.

Use In hysteria, tympanitis, palsy of the tongue and externally as an embrocation in rheumatism, gout, and to weak joints after luxations. Like other strong volatile oils, it relieves toothache when applied to the decayed tooth.

Dose. ♏j. to ♏v on a lump of sugar, as an oleo-saccharum.

CALAMUS AROMATICUS. U. S.—E. Acorus. L. Sweet Flag-root. (Acorus *Calamus*, *Hexand. Monogyn.* N. O *Acoraceæ*. Europe. U. S. ♃.)

Prop. Odor strong, rather fragrant; taste aromatic, warm, bitterish; affords some essential oil.

Oper. Stomachic, carminative.

Use. In anorexia; but seldom used.

Dose. ℈j. to ʒj. in powder.

CALAMINA. L. E. Carbonas Zinci Impurus, D. Calamine. *An Ore of Zinc.*

Comp. Oxide of zinc 65.2, carbonic acid 34.8. (*Derbyshire Calamine.*) It contains also sesquioxide of iron.

Prop. Friable, fracture uneven; color pale reddish-yellow opaque, dull.

Use. Principally for pharmaceutical purposes.

Off. Prep. *Calamina Præparata*, L. E. D.

CALAMINA PRÆPARATA. L. E. Carbonas Zinci Impurus Præparatus, D. Prepared Calamine.

The Calamine burnt and reduced to an impalpable powder. In this state it is sprinkled on excoriations and ichorous ulcers.

Off. Prep. *Ceratum Calaminæ*, L. E. *Unguent. Calaminaris*, D.

CALCII CHLORIDUM. U. S.—L. Calcis Murias, E. D. Chloride of Calcium. (*Cretæ* ℥v., *Acidi Hydrochlorici*, *Aquæ distillatæ*, *sing.* Oss. Mix the acid gradually with the water, and saturate with the chalk. When the effervescence is over, evaporate to dryness; then liquefy in a crucible, and pour the liquid on a smooth, clean stone. When cold, break the mass into pieces, and keep it in a stopped bottle.)

Comp. 1 eq. chlorine 35.42+1 calcium=20.5, eq. 55.92.

Prop. Inodorous; taste bitter, acrid; soluble in half its weight of cold water, and to any extent in boiling water. Deliquesces.

Oper. and *Use.* See Liquor Calcii Chloridi.

CALCIS CARBONAS PRÆCIPITATUM. D. Precipitated Carbonate of Lime. This is a very pure carbonate of lime, precipitated from solution of Chloride of Calcium by Carbonas Sodæ; and is fitter for internal use than the common prepared chalk.

Off. Prep. *Hydrargyrum cum Creta*, D. *Elect. Aromaticum*, D *Mistura Cretæ*, D.

CALCIS HYDRAS. L. Hydrate of Lime, or slaked lime.

Use. For making lime-water and ammonia.

CALCIS MURIAS. E. See Calcii Chloridum.

CALCIS PHOSPHAS PRÆCIPITATUM. D. Precipitated Phosphate of Lime. (Ossium crematorum et in pulverem tritorum *partem unam*, Acidi Muriatici diluti, Aquæ, utriusque *partes duas*. Digest for twelve hours, and filter the solution; add to it as much of the water of Caustic Ammonia as will be required to throw down the Phosphate of Lime. Wash this with a sufficiency of water, and finally dry it.)

This is merely the earth of bones separated from the animal matter. As it is an insoluble substance, little advantage can be expected from its administration.

CALOMELAS. E. See Hydrargyri Chloridum.

CALUMBA. L. E. Columbæ Radix, D. Colombo, U. Calumba Root. (Coculus *Palmatus*. N. O. *Menispermeæ* Africa. ♄.)

Prop. Odor slightly aromatic, taste an unpleasant bitter; bar of the sections thick, dark olive; central part yellowish. Water at 212° takes up one-third of the weight of the root. Alcohol also extracts its virtues.

Oper. Tonic, antiseptic

Use. In bilious vomitings, and those attendant on pregnancy dyspepsia, and cholera: in the mesenteric fever of infants, we have found the following powder, aided by daily long-continued frictions of the abdomen with soap liniment, of great efficacy ℞ Potassæ Sulphatis gr. x., Pulv. Calumbæ gr. vj., Pulv. Rhei Rad. gr. iij. Misce: bis terve quotidie sumend.

Dose. Gr. x. to ℈j. twice or thrice a day.

Incomp. Acetate and diacetate of lead; infusion of galls.

Off. Prep. *Infusum Calumbæ*, U. S.—L. E. *Tinct. Calumbæ*, U. S.—L. E D.

CALX. U. S.—L. E. D. Lime, or Quick Lime. (*From marble, or native Carbonate of Lime.*)

Comp. 1 eq. of calcium=20.5+1 oxygen=8, eq. 28.5.

Prop. White, pulverulent; taste burning, urinous; sonorous; decomposes animal matter: spec. grav. 2.3; infusible; dissolves in hydrochloric acid without effervescence: solution does not precipitate Ammonia.

Oper. Escharotic; but not now used.

Off. Prep. *Liquor Calcis*, L. E. D. *Potassa cum Calce*, L.

CALX CHLORINATA. U. S.—L. E. Chlorinated Lime. Chloride of Lime. (*Calcis Hydratis* ℔j. *Chlorini quantum satis sit.* Pass the chlorine through the lime spread in a proper vessel until it is saturated.)

Comp. 1 eq. of lime=28.5+1 chlorine=35.42, eq. 60.92.

Prop. White, with the odor of chlorine. Its solution quickly destroys vegetable colors.

Use. As a disinfecting agent.

CAMBOGIA. L. E. D. Gambogia, U. S. (Stalagmitis *Cambogioides*, *Polygam. Monæc.* N. O. *Guttiferæ.* Probably a Hebradendron. Edin. Ph. mention two kinds, *Siam* and *Ceylon* Camboge. ♄.)

Comp. Gum, resembling cherry-tree gum, and nearly insipid, resin, and an unknown principle.

Prop. Inodorous; color of fragments orange yellow; opaque, brittle, fracture glassy.

Oper. Cathartic (*drastic*), emetic, hydragogue, anthelmintic.

Use. In visceral obstructions and dropsy; in tape-worm, conjoined with carbonate of potassa.

Dose. Gr. ij. to gr. x. in powder, joined with calomel, squill, &c

Off. Prep. *Pilulæ Cambogiæ Comp.*, L. E. *Pil. Cathart. Comp.*, U. S.

CAMPHORA. U. S.—L. E. D. Camphor. (Laurus *Camphora*, Camphora *officinarum*, *Enneandria Monogyn.* N. O. *Lauraceæ.* East Indies. ♄.)

Comp. Carbon 70.28+hydrogen 10.36+oxygen 10.36. (*Dumas.*)

Prop. Odor strong, peculiar, fragrant; taste bitterish-aromatic, accompanied with the sensation of cold; volatile, white, semipellucid, brittle, yet not easily pulverized; texture crystalline; soluble in alcohol, æther, oils, vinegar, and, in a very small degree, in water; lighter than water.

Oper. Narcotic, diaphoretic, sedative; externally anodyne.

Use. In typhus, cynanche maligna, confluent small-pox, and other exanthemata of the typhoid type; in atonic gout, and as an adjunct to bark and opium in checking gangrene. It produces its narcotic and sedative effects with very little increase of pulse, and therefore may be used in mania, pneumonia, and other inflammatory complaints, united with nitre and antimonials. In doses of from 1 to 3 grains it acts as a diaphoretic. It is a useful adjunct to bark in typhoid diseases, to valerian, the fetid gums, volatile alkali and others, in hysteric and nervous complaints, and to antimonials in rheumatism and other inflammations. Externally it allays the pains of rheumatism, and other deep-seated inflammations, when dissolved in oil.

Dose. Gr. iij. to ℈j. in powder, with sugar, &c.; in pills; or in mixture with mucilage, or almond confection. The effects of an overdose are counteracted by opium. For external application it is dissolved in oil or in alcohol.

Off. Prep. *Mistura Camphoræ*, L. D. E. *Mistura Camphoræ cum Magnesia*, E. *Spir. Camphoræ*, L. E. D. *Tinct. Camphoræ Comp.*, L. E. D. *Acidum Acetosum Camphoratum*, E. D *Linimentum Camphoræ*, L. E. D. *Lin. Camphoræ Comp.*, L *Linimentum Ammoniæ Comp.*, E. *Lin. Hydrargyri*, L. *Lin Saponis*, L. E. *Lin. Opii*, E. D. *Lin. Terebinthinatum*, E.

CANCRI CHELÆ, Lapilli Cancrorum, D. Crab's Stones, or Eyes. (Cancer *Astacus*, the Crayfish. *Insecta Aptera*, L. *Canceres*, Cuv.)

Comp. Carbonate of lime, phosphate of lime, alumen.

Prop. Size of large peas, hemispherical, laminated, white, or reddish; digested in vinegar, they become soft and transparent, but retain their form.

Off. Prep. *Cancrorum Lapilli Præparati*, E.

CHELÆ CANCRORUM D. Crab Claws. (Cancer Pagurus, the black-clawed Crab.) As above.

CANELLA. U. S.—L. E. Canellæ Albæ Cortex, D. Canella Bark. (Canella *Alba*. *Dodecand. Monogyn.* N.O. *Canelleæ.* West Indies. ♄.)

Comp. An acrid essential oil, mannite, bitter extractive, resin, gum, starch, albumen, and saline substances.

Prop. Pieces flattish, yellowish grey; odor aromatic; taste pungent; fracture starchy. Virtues partially extracted by water, entirely by alcohol.

Oper. Stimulant, tonic.

Use. As an aromatic addition to bitter tonics and cathartics.

Dose. Gr. x. to ʒss. in powder: in infusion f℥jss.

Off. Prep. *Tinct. Gentianæ Comp.*, E. *Vinum Aloes*, L. *Pulvis Aloes et Canella.* U S. *Vinum Rhei*, U. S.

CANNABIS SATIVA INDICA. (Indian Hemp. Gunjab.) Asia, Africa, America.

Comp. Green resin 20 per cent.; green coloring matter.

Prop. The resin, *cannabin*, soluble in alcohol and æther, insoluble in acid solutions. When pure, of a blackish-grey color hard at 90°, softens at higher temperatures, and fuses readily soluble *in the fixed*, and some of the volatile oils; odor fragrant, narcotic; taste slightly warm, bitterish, acrid Dried plant, called *gunjah*, used for smoking. The larger leaves and capsules, without the stalks, constitute *sidhee, subhee*, or *bang*, used to form with water an intoxicating drink.

Oper. Anodyne, aphrodisiac, increases appetite and cheerfulness. in large doses, causes delirium and catalepsy; but in moderate doses, anti-convulsive.

Use. In tetanus, hydrophobia, rheumatism, and wherever an anodyne is required.

Dose. Gr. ij. to gr. vj. every three, four, six, or eight hours, according to circumstances. In hydrophobia, gr. xx. pro re nata. Of the tincture, made by dissolving 24 grs. of the alcoholic extract in ℥j. alcohol, give ʒj. in tetanus every half hour; in cholera, ten drops every half hour, till the required effect is produced.

CANTHARIS. U. S.—L. E. Cantharis Vesicatoria, D. The Blistering Fly. (Lytta *Vesicatoria, Insecta, Coleoptera.* South of Europe.) *Cantharis.*

Comp. Cantharidin, green oil, black insoluble matter, yellow viscid matter, fat, phosphates of lime and magnesia, uric acid.

Prop. Odor fetid; taste slightly acrid; body oblong, green gold, and shining; antennæ filiform, black. They retain their acrimony for many years, if kept dry.

Oper. Stimulant, diuretic, rubefacient, ves'cant; both their internal use and their external application are apt to produce strangury; active properties depend on the cantharidin.

Use. Internally in dropsies, obstinate gleet, and leucorrhœa; retention of urine owing to want of action in the bladder, and an incontinence of urine from debility of the bladder; lepra, but their internal use requires caution. For their external use, see *Empl.*, *Tinctura*, and *Acetum Cantharidis.*

Dose. Gr. ss. to gr. j. in a pill, with opium, or the extract of henbane and camphor, twice a day.

Off. Prep. *Acetum Cantharidis* (*epispasticum*), L. E. *Tinct. Cantharidis*, U. S.—L. E. D. *Emplast. Cantharidis*, L. E. D *Emplast. Cantharidis Vesicat. Comp.*, E. *Emplast. Picis cum Cantharide*, U. S. *Ceratum Cantharidis*, L.—U. S. *Ung. Cantharidis*, U. S.—L. E. D. *Ung. Infusi Canth. Vesicat.*, E.

CANTHARIS VITTATA U. S. Potatoe Fly. U. S.

Prop. Smaller than former; length about six lines; head of a light-red color, with dark spots on the top; feelers black; wing-cases black, with a yellow longitudinal stripe in the centre, and yellow margin; thorax black, with three yellow lines; abdomen and legs black and covered with down. Appears about the end of July on the potatoe vine.

Oper. Same as the former. There are several other species, all of which have the same properties.

CAPSICUM. U. S.—L. E. Capsici Annui Capsulæ cum Seminibus, D. The Capsicum berries. (Capsicum *annuum. Pentand. Monogyn.* N. O. *Solanaceæ.* South America. ☉.)

Prop. Odor aromatic, pungent; taste very biting, hot, aromatic; its active matter is yielded to æther, alcohol, and water.

Oper. Stimulant, rubefacient.

Use. In atonic gout, the flatulence of dyspepsia, lethargy. Its solution (*Capsici pulv.* ʒj., *Sodii Chlor.* ℈j., *Aceti* ʒiv., *Aquæ ferventis* f℥vj. *Cola*) forms the best gargle in cynanche maligna and scarlatina. Cataplasms of it are used in coma and the delirium of typhus.

Dose. Gr. iij. to gr. x. in pills.

Incomp. Nitrate of silver, bichloride of mercury, acetates of lead, sulphates of iron, zinc, and copper, and the carbonates of alkalies.

Off. Prep. *Tinctura Capsici*, U. S.—L. E.

CARBO ANIMALIS. U. S.—L. E. Animal Charcoal. (Prepared from flesh and bones.)

Use. For decolorizing vegetable salts; clarifying salts, and extracting the volatile oil from whiskey and other liquors.

CARBO ANIMALIS PURIFICATUS. U. S.—L. E. Purified Animal Charcoal.

Test. When incinerated with its own weight of red oxide of mercury, it leaves only a scanty ash.

Use. Chiefly for pharmaceutical purposes.

CARBO LIGNI. U. S.—L. E. D. Charcoal of Wood. (*Recens.*)

Comp. Carbon 68.4, hydrogen 1.5, a minute portion of oxygen, salts, earths, &c.

Prop. Inodorous, tasteless, black, brittle.

Oper. Antiseptic, absorbent.

Use. In the putrid eructations of dyspepsia, obstinate constipation; to relieve the nausea of pregnancy, and as a cataplasm with linseed meal to fetid ulcers: the best tooth-powder.

Dose. Gr. x. to ℈j. united with rhubarb.

CARBŎNAS BARYTÆ. U. S.—L. E. Carbonate of Baryta.

Comp. Carbonic acid 21.6, baryta 78.4. *Berzelius.* Or, 1 eq baryta=46.7+1 acid=22.12, eq.—98.82.

Use. For preparing the chloride of barium.

Test. 100 grains dissolved in an excess of nitric acid are not wholly precipitated by 61 grains of sulphate of magnesia.

CARBŎNAS POTASSÆ PURISSIMUS. U. S.—E. Pure Carbonate of Potash. *Salt of Tartar.*

This salt is the carbonate prepared from Bitartrate of Potassa, by fire.

CARBŎNATIS SODÆ AQUA. D. Solution of Carbonate of Soda. (Sodæ Carbonatis *quantum velis.* Let it be dissolved in the water, and let the specific gravity of the solution be to that of distilled water as 1024 to 1000.) *This requires* ℥j. *of the carbonate of soda for* Oj. *of water.*

Prep. and *Use.* The same as that of the solid salt.

CARDAMĪNE. L. Cardamine flores. D. Cardamine flowers. (Cardamine *Pratensis*, *Tetradynam. Siliq.* N. O. *Cruciferæ.* Europe. ♃.)

Prop. Almost inodorous; taste bitterish, slightly acrid.

Oper. Stimulant, diaphoretic, antispasmodic.

Use. In spasms.

Dose. ℈j. to ʒi. in powder, twice or thrice a day.

CARDAMŎMUM. U. S.—L. E. Cardamomum Amomum, Sem. D. Cardamom Seeds. (Alpinia *Cardamomum*, N. O. *Sitaminaceæ.* East Indies.)

Prop. Odor agreeably aromatic taste pungent, grateful.

Oper. Carminative, stomachic.

Use. In the flatulent colic of children, united with rhubarb and magnesia; but *principally to give* warmth to other remedies

Dose. Gr. v. to ʒj. *in powder.*

Off. Prep. *Ext. Colocynthidis Comp.*, U. S.—L E D. *Tinct. Cardamomi*, U. S.—L. E. D. *Tinct. Cardam. Comp.*, U. S.—L. E. D. *Tinct. Cinnam. Comp.*, U. S.—L. E. *Tinct. Gentianæ Comp.*, U. S.—L. *Tinct. Rhei*, U. S.—L. E. D. *Tinct. Rhei cum Aloe*, U. S.—E. *Tinct. Sennæ*, U. S.—L. E. *Spir Ætheris Aromaticus*, L. *Vinum Aloes*, U. S.—E. *Confect. Aromatica*, L. *Elect. Aromaticum*, D. *Pulv. Cinnamomi Comp.*, L. E. D. *Pulvis Aromaticus*, U. S. *Pilulæ Scillæ*, E. *Infusum Sennæ*, D. ——— *cum Tamarindis*, D.

CARICÆ FRUCTUS. D. Fici, L. E. The Fig. (Ficus *Carica*, the Fig Tree. *Polygam. Diæcia.* N. O. *Urticaceæ.* Persia. ♄.)

Prop. Taste sweet and mucilaginous.

Oper. Demulcent, suppurative.

Use. In pulmonary and other inflammatory diseases, in decoction; in cynanche tonsillaris, during suppuration, as a gargle (℞ *Caricarum* ℥ ij., *Aquæ* f℥ vj., *coque et cola;*) in gumboils, roasted, then split and applied to the part.

Off. Prep. *Decoctum Hordei Comp.*, L. D. *Confectio Sennæ*, L. D.

CARTHAMUS. U. S. (*Secondary.*) Dyer's Saffron. *Syngen. Æg.* N. O. *Comp.* Egypt and the Levant.

Prop. An exotic, annual plant; florets part employed; often called *Safflower*, or American Saffron; reddish yellow; peculiar, slightly aromatic odor; florets distinguished from saffron by their tubular form, and by the yellowish style and filaments which they enclose.

Oper. Laxative, and somewhat diaphoretic.

Use. As a substitute for saffron in measles, scarlatina, and other exanthematous diseases, to promote the eruption.

Dose. Of an infusion of ʒ ij. to a pint of boiling water, give without restriction as to quantity.

CARUM. U. S.—L. E. Carum Carui Semina, D. Caraway Seeds. (Carum *Carui*, U. S. *Pentand. Digyn.* N. O. *Umbelliferæ.* North of Europe. ♂.)

Prop. Odor aromatic; taste warm, grateful; figure ovate-oblong, striated.

Oper. Carminative.

Use. In flatulent colic, and to give warmth to purgatives.

Dose. Gr. x. to ʒ j. swallowed whole or in powder.

Off. Prep. *Ol. Carui*, U. S.—L. E. D. *Aq. Carui*, U. S.—L. *Spir. Carui*, L. E. D. *Spir. Juniperi Comp.*, U. S.—L. E. *Tinct. Cardam. Comp.*, L. E. D. *Tinct. Sennæ*, L. E. D. *Tinct. Sennæ et Jalap.*, U. S. *Confectio Opii*, L. *Confectio Rutæ*, L.

CARYŎPHYLLUS. U. S.—L. E. D. The Clove. (Eugenia *Caryophyllata.* *Icosandria Monogyn.* N. O. *Myrtaceæ.* Moluccas. ♄.)

Prop. Odor strong, aromatic, and peculiar; taste acrid, pungent; figure like a small nail with a toothed head; color deep brown. (*The unexpanded bud.*)

Oper. Stimulant, aromatic.

Use. As a corrigent to other remedies, and a condiment.

Dose. Gr. x. to. ʒ ss. in powder.

Off. Prep *Infusum Caryophylli*, U. S.—L. E. *Infusum Aurantii Comp.*, L. E. *Vinum Opii*, L. *Confectio Aromatica*, L.

Confect. Scammonii, L. D. *Elect. Aromaticum*, D. *Pilula Colocynthidis*, E. D.

CARYOPHYLLI OLEUM. L. E. Caryophyllorum Oleum, D. Oil of Cloves.

Comp. Carbon, hydrogen, and oxygen in a small proportion; *caryophyllin.*

Prop. Odor and taste of the clove; color yellow; heavier than water.

Oper. and *Use.* The same as the clove, externally, diluted with olive oil, as an embrocation in hooping cough; as an application in toothache.

Dose. ♏ij. to ♏v. on sugar.

Off. Prep. *Spir. Ammoniæ Aromat.*, L. *Spir. Lavand. Comp.*, E

CASCARILLA. U. S.—L. E. Cascarillæ Cortex, D. Cascarilla Bark. (Croton *Cascarilla*, or *Eleuteria*. *Monæc. Adelphia*, N. O. *Euphorbiaceæ*. Bahamas. ♄.)

Prop. Odor slightly aromatic; taste bitterish, aromatic; when burning, and the flame extinguished, the smoke has the odor of musk; active parts, an essential oil, and bitter extractive; completely extracted by proof spirit.

Oper. Tonic, stomachic.

Use. As an adjunct to cinchona in ague; in obstinate diarrhœa, and after dysentery; a good vehicle for powdered Peruvian bark, and small doses sulphate magnesia, and sulphuric acid in debility of stomach attended with constipation; in dyspepsia and flatulent colic.

Dose. Gr. x. to ʒi. in powder. The infusion is the best form.

Off. Prep. *Infusum Cascarillæ*, U. S.—L. E. *Tinct. Cascarillæ*, L. E. D. *Ext. Cascarillæ*, D.

CASSIA. U. S.—L. Cassiæ Pulpa, E. Cassia Fistula; Pulpa Leguminis, D. Cassia Pulp. (Cassia *Fistula*. *Decand. Monogyn.* N. O. *Leguminosæ*. India. Egypt. ♄.)

Prop. Pulp black, bright, shining; sweet, slightly acid; inodorous.

Oper. Laxative.

Use. Where a gentle medicine is required in costive habits, combined with aromatics.

Dose. ʒiv. to ℥i.

Off. Prep. *Confectio Cassiæ*, L. E. D. *Confectio Sennæ*, U. S. —L. E.

CASSIÆ CORTEX. E. See Cinnamomum.

CASSIA MARYLANDICA. U. S. (American Senna. *Indigenous.* ⊙.)

Comp. *Cathartin*, albumen, mucilage, starch, clorophylle, yellow coloring matter, volatile oil, fatty matter, resin, lignin, salts of potassa, and lime.

Prop. The same as the former, but less active. In most cases it may be substituted for it.

CASSIÆ OLEUM. E. See Cinnamomi Oleum.

CASTANEA. U. S. (Secondary.) Chinquapin. The bark. *Monœcia*, *Polyandria*. N. O. *Cupuliferæ*. Southern and Middle States. ♄.)

Prop. An indigenous shrub, from 6 to 10 feet high.

Oper. Tonic and astringent.

Use. In intermittents.

CASTORĒUM. L. E. D. Castor. (*Castor Fiber.* The Beaver. *Mammalia Glires*, L. *Mammalia Rodentia*, Cuv. Russia.)
A peculiar matter found in bags, near the rectum of the animal.
Comp. Carbonates of potassa, of lime, of ammonia, and of iron resin; extractive, mucilaginous matter, volatile oil.
Prop. Odor strong, unpleasant, peculiar; taste bitter, subacrid; color orange brown.
Oper. Antispasmodic, emmenagogue?
Use. In typhus, hysteria, epilepsy, amenorrhœa.
Dose. Gr. x. to ℈j. in a bolus; ʒj. or more in clysters; of little value as a remedy.
Off. Prep. *Tinctura Castorei*, U. S.—L. E. D.

CATĂPLASMA ALUMINIS. D. Cataplasm of Alum. (Ovorum duorum albumen, Aluminis ʒj. Agitate them together until they form a coagulum.)
Use. In ecchymosis of the eye.

CATĂPLASMA CARBONIS LIGNI. D. Cataplasm of Charcoal. (Carbonas ligni ab igne candentis, arena sicca superfusa recens extincti, et in pulverem subtilissimum triti, *quan. suf.* It may be added to the simple cataplasm in a tepid state.
Use. In gangrene and fetid ulcers.

CATĂPLASMA CONII. L. D. Hemlock Cataplasm. (Extractum Conii ℥i., Aquæ Oj. Mix, and add linseed meal enough to make a cataplasm.
Use. In cancer, painful sores, and glandular swellings.

CATĂPLASMA DAUCI. D. Carrot Cataplasm. (Dauci Carotæ hortensis Radicis, *q. s.* Boil the root in the water until it be soft enough to make a poultice.
Use. In gangrene and foul ulcers.

CATĂPLASMA FERMENTI. L. Cataplasma Fermenti Cerevisiæ, D. Yeast Cataplasm. (*Farinæ* ℔j., *Cerevisiæ Fermenti* Oss. *M. Calori leni expone.*)
Oper. Antiseptic.
Use. Applied to gangrenous and sloughing sores.

CATĂPLASMA LINI. L. Cataplasm of Linseed Meal. (*Aquæ ferventis* Oj., *Lini seminum contritorum*, *q. s.* ut idonea fiat crassitudo.)
Use. A suppurative poultice.

CATĂPLASMA SIMPLEX. D. Simple Poultice. (Pulveris pro Cataplasmate q. v., Aquæ ferventis q. s. to make a poultice to be anointed whilst hot with olive oil.)
Use. In inflammatory tumors and irritable sores.

CATĂPLASMA SINĀPIS. L. D. Mustard Cataplasm. (*Pulv. Sinapis Sem.*, *Lini Usitat. Sem. Pulv.*, ā ā ℔ss., *Aceti calidi*, *q. s. M.*)
Oper. Rubefacient, stimulant.
Use. Applied to the soles of the feet, in the delirium, coma, and sinking of typhus, &c.; to the pained part in rheumatism.

CATĔCHU. U. S.—L. E. Acaciæ Catechu Extractum, D. Catechu. (Acacia *Catechu*, *Polygam. Monœc.* N. O. *Leguminosæ.* East Indies. ♃.) *An extract of the wood of the Catechu; kernels of Areca Catechu, leaves of Uncaria Gambeer*
Comp. *Bombay Catechu*—tannin 54.5, extractive 34, mucilage 6.5, impurities 5 parts. *Bengal Catechu*—tannin 48.5, extractive mucilage 8, impurities 7 parts.
Prop. Inodorous; taste astringent, mucilaginous, sweetish; color

reddish-brown; soluble in water and in alcohol. The best kind yields to Sulphuric Æther 53, the lowest 28 per cent. of Tannic Acid, when passed through the percolator.

Oper. Astringent, tonic.

Use. In diarrhœa, from a relaxed state of the bowels and in intestinal and uterine hæmorrhages; locally in aphthæ, ulceration of the gums, and in coughs and hoarseness from the relaxation of the uvula and epistaxis.

Dose. Gr. x. to ℈iij. in powder; in the latter case, a piece is allowed to dissolve slowly in the mouth; but is best given with sugar, gum arabic, and water.

Off. Prep. *Infusum Catechu Comp.*, L. E. *Tinct. Catechu*, U. S. —L. E. *Elect. Mimosæ Catechu*, E. D.

CENTAURIUM. L. E. Erythræa Centaurii folia, D. Common Century Tops. (Chironia *Centaurium*. *Pentand. Monogyn.* N. O. *Gentianaceæ*. Europe. ⊙.)

Prop. Taste bitter. Active principle extracted both by water and alcohol.

Oper. Tonic.

Use. In dyspepsia and atonic gout.

Dose. Gr. xv. to ʒj.

CERA FLAVA ET CERA ALBA. U. S.—L. E. D. Yellow Wax and White (*A substance prepared by the Bee; and by some plants, as the Ceroxylon and Myrica Cerifera.*)

Comp. Carbon 63.12, hydrogen 16.91, oxygen 19.97 parts.

Prop. Odor aromatic, resembling that of honey; tasteless; dry; brittle; color yellow, when recent; but the odor and color are lost by bleaching.

Oper. Demulcent, emollient.

Use. In diarrhœa and dysentery; but principally used in the formation of cerates and ointments.

Dose. ℈j. to ʒss. twice or thrice a day, in form of emulsion; melt the wax with a little oil, then triturate it with yolk of egg, and groat gruel f℥ij.

Off. Prep. *Cera Flava Purificata*, D. *Unguent. Cerata*, *Emp. Varia*, and nearly all the Cerates of the U. S. Phar.

CERATUM. L. Unguentum Simplex. Ceratum Simplex, U. S.—E. Cerate. (*Olei Olivæ* f℥iv., *Ceræ* ℥iv. Melt the wax, then add the oil, and mix.) Emollient, to excoriations, &c.

Off. Prep. *Ung. Zinci*. E.

CERATUM CALAMINÆ. L. E. Unguentum Calaminæ, D Calamine Cerate. *Calaminæ Prep.*, *Ceræ Flavæ*, ā ā ℔ss., *Ol. Olivæ* f℥xvj. The oil and wax being melted, mix; then remove them from the fire: as soon as they begin to thicken add the calamine, and stir until the whole be cold.)—*Turner's Cerate.*

Oper. Desiccative, epulotic.

Use. To ulcers, with a thin, acrid discharge; to burns after the inflammation is abated; to the eyelids in ophthalmia tarsi.

CERATUM CANTHARIDIS. L. D. Unguentum Cantharidis, E. Cerate of the Spanish Fly. (*Cerati Cetacei* ℥vj., *Cantharidum in Pulv. sub.* ℥j. The cerate being softened by heat, stir in the flies.)

Oper Irritative.

Use For keeping up a discharge from a blistered surface; but few constitutions can bear the irritation it induces.

CERĀTUM CETĀCEI. U. S.—L. Ceratum Simplex, E. Unguentum Cetacei, D. Spermaceti Cerate. (*Cetacei* ℥ ij., *Ceræ Alb.* ℥ ij., *Olivæ Ol.* f℥ iv. The wax and oil being melted together, add the spermaceti, and stir until the whole is cold.)

Oper. Emollient, cooling.

Off. Prep. *Ceratum Cantharidis*, L.

CERĀTUM HYDRARGYRI COMPOSITUM. L. Compound Mercurial Cerate. (*Unguenti Hydrargyri fortioris*, *Cerati saponis s.* ℥ iv., *Camphoræ* ℥ j. Mix.)

Use. Stimulant and rubefacient.

CERĀTUM PLUMBI ACETATIS L. Ung. Acetatis Plumbi, E. D. Cerate of Acetate of Lead. (*Plumbi Acetas cont.* ʒ ij., *Ceræ Alb.* ℥ ij., *Olivæ Ol.* f℥ viij. Melt the wax in seven fluid ounces of the oil, then add the acetate rubbed down with the remainder; and stir with a wooden spatula until the whole be united.)

Oper. Cooling, astringent, resolvent.

Use. In inflamed sores, excoriations, and burns.

CERĀTUM PLUMBI COMPŌSĪTUM. L. Ceratum Plumbi Subacetatis, U. S. *Cerate of Subacetate of Lead.* (*Goulard's Cerate.*) Compound Lead Cerate. (*Liq. Plumbi diacetatis* f℥ iij., *Ceræ* ℥ iv., *Olivæ Ol.* Oss., *Camphoræ* ʒ ss. Melt the wax in f℥ vij. of the oil, then remove the mixture from the fire, and when it begins to thicken, add gradually the solution of diacetate of lead, and assiduously stir the whole with a wooden spatula until it is cold; lastly, add the camphor dissolved in what remained of the oil, and mix.)

Oper. and *Use.* The same as the former.

CERĀTUM RESĪNÆ. U. S.—L. Resin Cerate. (*Resinæ Ceræ* ā ā ℔j., *Olivæ Ol.* f℥ xvj. Melt the resin and wax over a slow fire, then add the oil, and strain while hot.)—*Yellow Basilicon*

Oper. Digestive, cleansing, incarnating.

Use. To foul indolent ulcers.

Off. Prep. *Linimentum Terebinthinæ*, L.

CERĀTUM RESĪNÆ COMPOSITUM. U. S. Compound Resin Cerate. (Take of resin, suet, yellow wax, ā ā ℔j., turpentine ℔ss., flaxseed oil Oss. Melt together, strain through linen, and stir till cool.)

CERĀTUM SABINÆ. U. S.—L. E. Unguentum Sabinæ, D. Savine Cerate. (*Sabinæ* ℔j., *Ceræ* ℔ss., *Adipis præp.* ℔ij. Having melted the wax and lard, boil therein the savine leaves, and strain through a linen cloth. The U. S. Phar. directs ℥ ij powdered savine to be mixed with ℔j. melted resin cerate.)

Oper. Irritative, drawing.

Use. To keep a discharge from a blistered surface. It is much preferable to the Ceratum Cantharidis, occasioning less pain, and preserving a sufficient discharge.

CERĀTUM SAPŌNIS. U. S.—L. Soap Cerate. (*Sapon.* ℥ x., *Ceræ* ℥ xijss., *Plumbi Oxidi Cont.* ℥ xv., *Olivæ Ol.* Oj., *Aceti Cong.* Boil together the vinegar and oxide of lead, over a slow fire, stirring constantly until they combine; then add the soap and boil again until the water be evaporated; lastly, mix in the oil and wax melted together. The U. S. Phar. directs to take Oij. solution of subacetate of lead, ℥ vj. soap, ℥ x. white wax, Oj olive oil; boil the solution of subacetate of lead with the soap, over a slow fire, to the consistence of honey, then evaporate over a water bath till the water is all dissipated, and lastly mix in the oil and wax,)

Oper. Desiccative, resolvent.

Use. Applied. spread on linen, round fractured limbs, after all inflammation is abated, and the bones are united; and to strumous swellings.

CERĀTUM SIMPLEX. U. S. Simple Cerate. (Take of lard ℥viij., white wax ℥iv. Melt them together, and stir them constantly till cool.)

CERĀTUM ZINCI CARBONATIS. U. S. Cerate of Carbonate of Zinc. (*Turner's Cerate.*) (Take of *prepared Carbonate of Zinc, Yellow Wax,* each half a pound, *Lard* two pounds. Melt the wax and lard together, and when upon cooling they begin to thicken, add the carbonate of zinc, and stir till cool.)

CEREVISIÆ FERMENTUM. L. D. Yeast. The frothy matter collected on the surface of beer, during fermentation.

Use. To induce fermentation in poultices. It has also been given internally with advantage, in combination with sugar, and wine in typhus fevers.

CETĀCĒUM U. S.—L. E. D. Spermaceti. (Physeter *Macrocephalus.* The Spermaceti Whale. *Mammaliæ Cetaceæ,* L.)

Comp. Carbon, hydrogen, oxygen.

Prop. Inodorous, insipid, white, crystallized, friable, semitransparent, unctuous. Spec. grav. 9.433; melts at 112° of heat; partially soluble in alcohol.

Oper. Demulcent, emollient.

Use. In coughs and dysentery; and in the composition of ointments.

Dose. ʒss. to ʒjss. rubbed up with sugar, or with an egg, in emulsion.

Off. Prep. *Ung. Simplex,* E. *Ceratum Cetacei,* U. S.—L. *Ung. Cetacei,* D. *Ung. Aquæ Rosæ,* U. S.

CETRARIA. U. S.—L. E. D. See Lichen Cetraria.

CHIMAPHILA. L. *Vide* Pyrolæ Umbellatæ herba.

CHONDRUS. U. S. *Chondrus Crispus.* Greville. (*Alg. Brit.* 4.) Irish Moss. A good substitute for the Iceland Moss, which it closely resembles. (Macerate ℥ss. of the moss ten minutes in cold water, turn it off, add Ojss. boiling water; boil to a pint, strain, and add sugar and lemon juice to improve the flavor. Milk may be substituted for water, if a more nutritious preparation is required.)

CHENOPODIUM. U. S. Worm Seed. (*Pentand. Digyn.* N. O *Chenopodiæ. Indigenous.* ⊙.)

Prop. Seed of the size of a pin's head, dull brownish color, bitterish pungent taste, peculiar smell; owes its virtues to a volatile oil.

Oper. Anthelmintic.

Use. To destroy lumbrici in children, for which it is given morning and evening for three or four days; then followed by calomel, or some brisk cathartic.

Dose. Of the powdered seeds, from ℈j. to ℈ij. to a child two or three years old, in syrup; of the *oil,* which is more frequently given, from five to ten drops, mixed with sugar or in emulsion of the decoction, made by boiling ℥j. of the fresh plant in Oj of milk, with the addition of orange peel or some other aromatic, a wineglassful, or a tablespoonful of the expressed juice of the leaves.

CICHORIUM. *Intybus.* Wild Succory. (*Syngynesia.* N. O. *Compositæ.* Exotic. Cultivated as a salad. ♃.) Common garden *Endive* is the *C. Endivia.*

Prop. A perennial herbaceous plant, from one to two feet high. Whole plant has a bitter taste, without acrimony or any very peculiar flavor. Taste strongest in the root, weakest in the flowers.

Oper. A gentle, unirritating tonic, aperient, deobstruent, alterative

Use. In hepatic congestion, jaundice, and other visceral obstructions; pulmonary affections.

Dose. Boil ℥ij. of the root, or a handful of the herb, in a pint of water, twenty minutes; add milk and sugar, and drink warm —as a substitute for coffee.

CIMICIFUGA. U. S. (Secondary.) (*Black Snake Root. Polyand. Pentagyn.* N. O. *Ranunculaceæ.* ⊙.)

Comp. Gum, starch, sugar, resin, wax, fatty matter, tannin, gallic acid, coloring matter, lignin, salts of potassa, lime, magnesia, and iron.

Prop. Color of the roots dark brown, internally whitish, taste bitter and somewhat astringent, yields its virtues to boiling water.

Oper. Tonic, diuretic, diaphoretic, expectorant, emmenagogue.

Use. Employed extensively in the United States, as a domestic remedy, in rheumatism, dropsy, chorea, hysteria, and especially in pulmonary affections, for which it has been regarded by some as a specific.

Dose. Of the powder gr. x. to ʒj.; of the decoction, made by boiling ℥j. of the bruised root in Oj. of water; from f℥j. to f℥ij. may be given several times a day.

CINCHŌNÆ CORDIFOLĪÆ CORTEX. L. D. Cinchona flava. U. S.—E. Yellow Bark. (*Pent. Monogynia.* N. O. *Cinchonaceæ.* South America. ♃.) *Calasaya of the Spaniards* · *the real plant is unknown.*

Comp. The active principle of the yellow bark is the alkaloid *quinæ*, combined with a peculiar acid, the *kinic*, or *cinchonic* in the state of an acid salt: besides these, it contains an *oily and a yellow coloring matter, tannin, kinate of lime, and woody fibre.*

Prop. Odor aromatic; taste bitter, slightly astringent; in pieces a span long, not always rolled, often without the epidermis, which is very thick and inert; light, friable, fracture fibrous; internally of a yellowish cinnamon color. Its active principle is an alkali named *Quina.*

CINCHŌNÆ LANCĪFOLĪÆ CORTEX. L. D. Cinchona Coronæ Cinerea, E. *Cinchona Pallida*, U. S. Pale Bark. *The bark of many species of Cinchona.*

Comp. Active principle, alkaloid *cinchonia*, obtained by boiling the bark in water acidulated with sulphuric acid, precipitating by lime, drying the precipitate, and digesting in alcohol. Not much used, in consequence of the greater cheapness and efficacy of *quina* and its salts. One pound pale bark contains ʒjss. to ʒij. *Sulph. Cinchonia.*

Prop. Odor aromatic; taste pleasant, less bitter and astringent than yellow bark; pieces rolled in double or single quills, a span long, thin; epidermis brown, cracked; fracture resinous; internally of a cinnamon or fawn color. Its active principle is an alkali, which has been named *Cinchonia*.

CINCHŌNÆ OBLONGIFOLĬÆ CORTEX. L. D. Cinchona rubra. U. S.—E. Red Bark.

Comp. It contains both *Quina* and *Cinchonia*, combined with cinchonic acid; one pound yields ʒij. sulph. quinæ and ʒj. sulph. cinchoniæ; 100 parts by weight yield *acid cinchonate of cinchonia* 1.54, *green fatty matter* 0.79, *resin* 2.18, *red extractive* 9.09, *tannin* 5.60, *gum* 4.40, *lime* 1.40, *woody fibre* 75.69.

Prop. Odor and taste the same as the pale, but more intense; in quills and flat pieces, solid, heavy, dry; fracture short and smooth; internally woody, fibrous, of a deep brownish red color. Its active principle two alkalies, *Quina* and *Cinchonia*.

Oper. These three species, nearly alike, are strongly and permanently tonic and antiperiodic, slightly astringent, stomachic, and febrifuge; (the yellow is preferred in Peru;) the red is apt to nauseate.

Use. In intermittents, after evacuating the stomach and bowels, in continued fevers, keeping the bowels clear; confluent small pox; erysipelas; acute rheumatism; cynanche maligna, scarlatina; passive hæmorrhages; and in every disease attended with deficient action. Externally in glysters, gargles, and lotions, in gangrenous ulcerations, &c. To check the nausea excited by it, wine, aromatics, and carbonic acid are added; to prevent purging, opium; costiveness, rhubarb. The red is the most useful in gangrene.

Dose. Given in infusion, decoction, and extract. The latter is a good form, if well prepared: of this, gr. iij. to gr. x. in pill, or dissolved in infusion of roses, or syrup of orange peel, three times a day. Of the powder, ℈j. to ʒiij. in infusion of liquorice, or water. Vide *Decoct. Tinct. Infusum.*

Off. Prep. *Decoctum Cinchonæ*, U. S.—L. E. D. *Infusum Cinchonæ*, U. S.—L. E. D. *Ext. Cinchonæ*, U. S.—L. E. D. *Ext. Cinchonæ Resinosum*, L. D. *Tinct. Cinchonæ*, U. S.—L. E. D *Tinct. Cinchonæ Comp.*, U. S.—L. E. D. *Vinum Gentianæ Comp.*, D.

CINCHONIA. Cinchonia[*] or Cinchonine. F. (Take any quantity of powder of pale Cinchona, boil it in alcohol until it lose all bitterness, and distil the tincture to dryness. Dissolve the residue in boiling water acidulated with hydrochloric acid, then add an excess of magnesia, and boil for some minutes. Filter when cold; wash the magnesian residue with cold water, and dry it in a stove; then digest repeatedly in boiling alcohol, and mix the alcoholic liquors, which, cooling, will yield crystals of Cinchonia.)

Prop. Inodorous; bitter; in white, translucent needleform crystals, scarcely soluble in cold water; soluble in 2500 parts of water at 212°; very soluble in alcohol, but in small quantity only in æther and volatile oils.

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[*] In translating the French names for the alkaloids, and their salts, I have employed the termination in *ia* or *a*, to make them conform with the names of the other alkalies, and with the London Pharmacopœia.

Comp. Carbon 76.97, nitrogen 9.02, hydrogen 6.22, oxygen 7.97, in 100 parts; or 20 eq. of carbon=122.4+12 of hydrogen=12+1 of nitrogen=14.15+1 of oxygen=8, equiv.=156.55.

Oper. Tonic.

Use. In all cases in which bark is useful. Not much used, as quinine has taken its place, being of superior efficacy.

Dose. From gr. ij. to gr. x.

Prep. *Syrupus Cinchoniæ, Tinctura Cinchoniæ,* U. S. *Vinum Cinchoniæ.*

CINNABARIS. E. Cinnabar. See Hydrargyri Bisulphuretum

CINNAMOMUM. U. S.—L. E. D. Cassiæ Cortex. E. Cinnamon Bark. Cassia. (Laurus *Cinnamomum, Enneandria. Monogyn.* N. O. *Lauraceæ.* Ceylon. ♃.)

Comp. *Volatile oil, tannin, mucilage, coloring matter, lignin,* and an *acid.*—(Vauquelin.) 112 lbs. recent cinnamon yield ℥ ij. oil: often adulterated.

Prop. Odor aromatic; taste pleasantly pungent, sweetish, depending on essential oil; color light yellow, brown; pieces quilled within each other, not thicker than paper; pliable; fracture fibrous and woody.

Oper. Stimulant, astringent, carminative, tonic.

Use. As a grateful aromatic in dyspepsia and diarrhœa; to cover the taste of nauseous remedies, and with cathartics to prevent griping. The infusion checks vomiting. Chewed in palsy of the tongue.

Dose. Gr. v. to ℈j. in powder.

Off. Prep. *Aq. Cinnamomi,* U. S.—L. E. D. *Infusum Catechu,* U. S.—L. E. *Infus. Digitalis,* U. S. *Spir. Cinnamomi,* L. E. D. *Spir. Lavandulæ Comp.,* U. S.—L. E. D. *Tinct. Cardamomi Comp.,* L. E. D. *Tinct. Catechu,* U. S.—L. E. *Tinct. Cinnamomi,* U. S.—L. E. D. *T. Cinnam. Comp.,* U. S.—L. E. *Spir. Ætheris Aromat.,* L. *Vinum Opii,* L. E. *Acid. Sulphuricum Aromat.,* U. S.—E. *Confect. Aromat.,* U. S.—L. D. *Elect. Catechu,* D. E. *Pulv. Cinnam. Comp.,* L. E. *Pulv. Cretæ Comp.,* L. E. *Pulv. Kino Comp.,* L. *Pulv. Aromat,* U. S. *Emplast. Aromat.,* D.

CINNAMOMI OLEUM. L. E. D. Cassiæ Olei, E. Oil of Cinnamon. Oil of Cassia.

Prop. Odor of the bark; taste pungent, hot; cherry-red color; sinks in water; soluble in alcohol. Nitric acid converts it into a uniform crystalline mass.

Oper. Powerfully stimulant; stomachic.

Use. In cramps of the stomach, hiccough, and flatulent colic inserted into a decayed tooth to allay toothache.

Dose. ♏j. to ♏iij. on a lump of sugar.

CNICI BENEDICTI FOLIA. D. Blessed Thistle. (*Syngen. Polygam. Frustr.* N. O. *Compositæ Capitatæ,* L. *Cinaraceæ.* Greek Islands. ⊙.)

Prop. Odor unpleasant; taste bitter.

Oper. Strong decoction emetic; strong infusion diaphoretic; light infusion tonic, stomachic, antiperiodic.

Use. For the two former purposes it is rarely used; but the light infusion, made with ʒ vj. of the plant in Oj. of cold water, is an excellent bitter in loss of appetite, and in the dyspepsia of the irregular.

Dose. Gr. xv. to ʒj. in powder; of the infusion f℥ij every three hours.

COCCULUS. E. Cocculus suberosus. Fructus Vulg. Cocculus Indicus, D. Cocculus *Indicus*. (Anarsierta *cocculus Diœcia, Dodecandria*. N. O. *Menispermaceæ*. Malabar. ♃.) Contains *Picrotoxine*.

Prop. Blackish purple, not unlike a small dry cherry.

Oper. Stimulant, narcotic, poisonous; used extensively for adulterating malt liquors.

About 3000 bags are annually employed in England; and, Mr. Pereira remarks, chiefly for adulterating beer and ale, though the practice is prohibited by the legislature, under a penalty of £200 upon the brewer, and £500 upon the seller of the drug. We have no laws on the subject.

COCCI. U. S.—L. E. Coccus Cacti, D (Coccus Cacti. *Insecta Hemiptera.* Mexico.) *The Cochineal Insects. The Dried Female.*

Comp. A peculiar coloring matter, *carminia;* an animal principle, *coccino*, stearine, elaine, an odoriferous acid, and saline matters.

Prop. Faint, heavy odor; taste acrid, bitterish, astringent; color blackish red externally, purple red within; small, irregular, roundish.

Use. Chiefly for giving a red color to tinctures, &c.

COCHLEARIA OFFICINALIS HERBA. D. Common scurvy grass. (Cochlearia *Officinalis*. *Tetradynamia Siliculosa* N. O. *Cruciferæ*. ⊙.)

Use. Of little value, and scarcely ever used.

CODEIA. A new alkaloid, obtained from opium.

Comp. Consists of 31 carbon, 40 hydrogen, 5 oxygen, 2 azote.—(*Pelletier*.)

Prop. In crystals, soluble in water, alcohol, and æther: effects not well understood; supposed to be stimulant and narcotic; not used in medicine.

COLCHICI CORMUS ET SEMINA L. E. Col. Radix et Semen, U. S. Colchici Autumnalis, bulbus, Semina, D. Colchici Autumnalis Radix, E. The Bulb and Seeds of the Meadow Saffron. (Colchicum *Autumnale. Hexand. Trigyn.* N. O. *Melanthaceæ*. Europe. ♃.) *Dug in July and August.*

Comp. *Colchicia*, a peculiar alkaloid resembling Veratria, fecula.

Prop. Taste acrid, excoriating the mouth; acrimony lost in drying.

Oper. Narcotic, diuretic, cathartic.

Use. In dropsies, gout, rheumatism, neuralgia, bronchitis, and scarlet fever. (*It is supposed that it forms the active ingredient of the Eau Medicinale.*) Colchicum is rather palliative than curative in gout and rheumatism. It is a useful addition to saline medicines in fevers and all inflammations. It should be given in small doses combined with magnesia, and if necessary, often repeated; as, *Magnes.* gr. xv, *Mag. Sulphat.* ʒj., *Aceti Colchici* ʒj. to ʒij., sweetened with *Ext. Glycyrrh.*; or a teaspoonful of the following every three or four hours: (℞ *Vini Colch. Sem.* fʒij., *Aquæ Camph.* fʒvj., *Sulphat. Morphiæ* gr. ss., *Sacch. Alb.* ʒj. Mix.); or till relief is obtained. In chronic bronchitis and asthma it should be given in still smaller doses. Should be given with great caution; ♏xx. of *Vinum Colchici* is a medium dose. A very good form in rheumatism is the following: (℞ *Vini Colch. Sem.* f ʒ ij., *Aquæ Camphor.* f ℥ vj. *Sulphat. Morphiæ* gr. ss., ad gr. j., *Sacch. Alb.* ʒj M.) Dose, a teaspoonful every 3 or 4 hours, or three times a day. Also in chronic bronchitis and asthma.

Dose. Gr. j. to gr. v. of the recent bulb in pills.

Off. Prep. *Acetum Colchici,* U. S.—L. E. *Oxymel Colchici,* D. *Tinct. Colchici,* U. S.—L. E. *Vinum Colchici,* U. S.*—L. E.

COLOCYNTHIS. U. S.—L. E. Fructus Pulpa, D. Bitter Cucumber Pulp. (Cucumis *Colocynthis. Monæc. Syngen.* N. O. *Cucurbitaceæ, L. J.* Cape of Good Hope. ⊙.)

Comp. 100 parts of the dry pulp of colocynth contain 14.4 parts of *colocynthin,* 10 of extractive, 4.2 of fixed oil, 13.2 of a resinous substance insoluble in æther, 9.5 of gum, 3.0 of pectic acid (*pectin*), 17.6 of gummy extract, 2.7 of phosphate of lime, 3.0 of phosphate of magnesia, and 19.0 of lignin, besides water.

Prop. Taste bitter, nauseous, acrimonious; light, white or pale yellow; spongy.

Oper. Strongly cathartic, drastic, hydragogue.

Use. Too violent to be used alone. When combined with calomel, extract of jalap, and gamboge, colocynth forms a highly efficient and safe cathartic, especially adapted to congestion of the liver and portal circle, and torpidity of this organ. In dropsy, and affections of the head, also, highly useful.

Dose. Gr. j. to gr. v.

Off. Prep. *Extract. Colocynthidis,* L. E *Ext. Colocynth. Comp.,* U. S.—L. D. *Pilul. Colocynthidis,* E. D. *Pilulæ Colocynthidis et Hyoscyami,* E.

CONFECTĬO AMYGDĂLÆ. L. D. Conserva Amygdalarum, E. Confection of Almonds. (*Amyg. Dul.* ℥viij., *Acaciæ Gum* ℥j., *Sacch. Alb.* ℥iv. Having bleached the almonds, beat the whole into a uniform paste.) This preparation is merely a good mode of keeping almonds in a state fit to make the almond mixture.

CONFECTĬO AROMATĬCA. U. S.—L. D. Elect. Aromaticum, E. Aromatic Confection. (*Cinnamomi, Myristicæ, sing.* ℥ij., *Caryoph.* ℥j., *Cardam.* ℥ss., *Croci* ℥ij., *Cretæ Præp.* ℥xvi., *Sacch. Pur.* ℔ij. Rub the dry substances to a fine powder, and keep it in a stoppered vessel. When it is to be used, add water gradually till the whole be incorporated.)

Oper. Stimulant, cordial.

Use. In the low stage of typhoid fevers; atonic gout; hysteria, nervous languors.

Dose. Gr. x. to ʒj. in bolus or mixtures.

Incomp. Acids of any kind; metallic salts.

CONFECTĬO AURĂNTII. U. S.—L. Conserva Aurantii, E Confection of Orange. (*Aur. Cort. exter. recent. radula separ.* ℔j., *Sacch. pur.* ℔iij. Beat the rind in a stone mortar with a wooden pestle, gradually adding the sugar.)

Oper. Stomachic.

Use. In dyspepsia of children; and as a vehicle for other remedies.

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* The U. S. Pharmacopœia directs wine of the seed and wine of the root

Dose. ʒj. to ℥j.

CONFECTĬO CASSĬÆ. L. Elect. Cassiæ, D. Cassia Confection. (*Cassiæ pulpæ* ℔ss., *Mannæ* ℥ij., *Tamarindi pulpæ* ℥j., *Syr. Rosæ* f℥viij. Bruise the manna; then dissolve it by heat, and having mixed in the pulp, evaporate to a proper consistence.)

Oper. Gently laxative.

Use. For habitual costiveness; and as a purge for children.

Dose. ʒj. to ℥j.

CONFECTĬO OPĬI. U. S.—L. D. Electuar. Opii, E. Opium Confection. (*Opii duri* ʒvj., *Piper. Long.* ℥j., *Zingib. rad.* ℥ij., *Carui Sem.* ℥iij., *Tragacanthæ contritæ* ʒij., *Syrupi* O℥xvj. Rub the opium with the syrup made hot; then add the other articles in the state of powder, and mix.) *Gr.* j. *of Opium in gr.* xxxvj.

Oper. Narcotic and stimulant

Use. Atonic gout, flatulent colic colliquative diarrhœa, in the chalk mixture.

Dose. Gr. x. to ʒss. in a bolus, or mixture.

CONFECTĬO PIPERIS NIGRI. L. Electuarium Piperis, E Confection of Black Pepper. (*Piperis nigri, Inulæ,* ā ā ℔j., *Fœniculi* ℔iij., *Mellis, Sacchari,* ā ā ℔ij.) *Substitute for Ward's Paste.*

Prop. Warm stimulant.

Use. In hæmorrhoids; used externally.

Dose. ʒj. to ʒij.

CONFECTĬO RŎSÆ CANĪNÆ. L. Conserva Rosæ Fructus, E. Confection of Dog Rose. (*Rosæ Can. Pulpæ* ℔j., *Sacch pur.* ℥xx. Rub them together until they be well incorporated.)

Use. Chiefly as a vehicle for other remedies.

CONFECTĬO RŎSÆ GALLĬCÆ. U.S.—L. Conserva Rosæ, E. D. Confection of the Red Rose. (*Rosæ Gal. Petal. nondum explic. abject. ung.* ℔j., *Sacch. pur.* ℔iij. Beat the petals in a stone mortar, then add the sugar, and beat into a uniform mass.)

Oper. Astringent, tonic.

Use. In diarrhœa. Rubbed up with new milk, it is useful in early convalescence from acute diseases. A good vehicle.

Dose. ʒj. to ℥j.

CONFECTĬO RUTÆ. L. D. Confection of Rue. (*Rutæ exsic.; Carui; Lauri Bacc., Sing.* ℥jss., *Sagapeni* ʒiv., *Piper. Nig.* ʒij.; *Mellis* ℥xvj. Rub the dry substances to a very fine powder, then add the honey, and mix.)

Oper. Antispasmodic, carminative.

Use. In the convulsive affections of children, given in clysters; ℈j. to ʒj. in Oss. of gruel.

CONFECTĬO SCAMMONII. L. Elect. Scammonii, D. Confection of Scammony. (*Scammonii contriti* ℥jss., *Caryoph font., Zingiber. pulv., sing.* ʒvj., *Olei Carui* fʒss., *Syr. Rosæ, q. s.* Rub the dry substances to a very fine powder, then rub them again with the syrup· add the oil of caraway, and mix.)

Oper. Warm cathartic.

Dose. ℈j. to ʒj. in a bolus.

CONFECTĬO SENNÆ. U. S.—L. Elect. Sennæ, E. Elect. Sennæ. D. Confection of Senna. (*Sennæ Fol.* ℥viij., *Ficorum* ℔j., *Tamarindi, Cassiæ, Prunorum Gall. Pulpæ, sing.* ℔ss.

Cori and. ℥iv., *Glycyrrhizæ* ℥iij., *Sacch. pur.* ℔ijss., *Aqua* [illegible] Rub the Senna leaves and Coriander seeds to powder, and sift boil the residue with the figs, liquorice root, and the water to one half, then press and strain. Evaporate the strained liquor to f℥xxiv., then add the sugar. Finally, rub the syrup with the pulp, and adding the sifted powder, mix the whole.

Oper. Laxative.

Use. In habitual costiveness, and that attending pregnancy.

Dose. ʒj. to ʒiv.

CONII FOLIA, SEMEN. U. S. FRUCTUS.* L. Conium, E. Conii Maculati Folia, D. Hemlock Leaves and Seeds. (Conium *Maculatum. Pentand. Digyn.* N. O. *Umbelliferæ* Indigenous. ⊙.)

Comp. Conia, resin, albumen, odorous oil, extractive.

Prop. Odor heavy and disagreeable; taste bitter, nauseous, herbaceous; color a dull green; light destroys its virtues, therefore the powder should be kept in opaque bottles, well corked. The powder, triturated with Liquor Potassæ, exhales the odor of Conia.

Oper. Narcotic, poisonous in an over-dose, resolvent.

Use. As a palliative in cancer and scirrhous, scrofulous and syphilitic ulcerations and swellings; pertussis; chronic enlargement of the liver and other abdominal organs; cutaneous affections; asthma; chronic pulmonary diseases, and neuralgic affections. Externally ℥iij. of the dried herb boiled in Oj. of water, as a fomentation to open scrofulous and cancerous ulcers; or as a cataplasm, by adding linseed meal and oatmeal.

Dose. Gr. ij. to ℈j. of the powder, or from ♏xij of the expressed juice, very gradually increased to ♏lx. Of the *extract*, gr. j. to gr. iv., to be reduced if it cause vertigo. The extract is the best form of administering it: it may be usefully combined with ipecacuanha in pulmonary affections, where we wish to quiet cough and relieve bronchial irritation.

Off. Prep. *Extractum Conii*, U. S.—L. E D. *Tinct. Conii*, U. S. —L. E. D.

CONTRAYĒRVA. U. S. (*Secondary.*)—L. Contrajerva Root. (Dorstenia Contrajerva. *Tetrand. Monogyn.* N. O. *Urticaceæ.* South America. ♃.)

Prop. Odor aromatic, heavy; taste bitter, styptic, sweetish.

Oper. Tonic, stimulant, sudorific.

Use. In typhus; nervous fever; the fever of dentition in weak infants; and dysentery.

Dose. Gr. x. to ʒss.

COPAÏBA. U. S.—L. E. Copaiferæ Officinalis Resina, D. Copaiba. (Copaifera *Langsdorfii, Decand. Digyn.* N. O. *Leguminosæ.* Brazils. ♄.)

Comp. Volatile oil 41.00 per cent., hard resin 51.38, soft resin 2.18, water 5.44.

Prop. Odor peculiar, not unpleasant; taste pungent, bitter; consistence of syrup; yellowish, transparent; soluble in two parts of alcohol, in æther, and the expressed oils; miscible in *distilled* water, by means of mucilage; spec. grav. 0.950. It dissolves its weight of Carbonate of Magnesia, aided by gentle heat, and remains translucent.

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* Often mistaken for *Cicuta virosa*, or *C. maculata*, Cowbane, Water Hemlock. *Cicuta*, though formerly applied to this plant, belongs to a different genus

Oper. Stimulant, diuretic, purgative in large doses; acts on the urethra.

Use. In gonorrhœa, gleet, leucorrhœa, dysentery, and all affections of mucous membranes; hæmorrhoidal affections.

Dose. ♏xx. to fʒj. in emulsion with gum or yolk of egg; in pills, by mixing the copaiba with magnesia and exposing the mixture to the air.

Incomp. Sulphuric acid, nitric acid.

Tests. Agitate fʒj. of liq. ammoniæ with fʒijss. of copaiba; if it remains milky when at rest, it contains castor oil.

COPAIBÆ OLEUM. E. Oil of Copaiba. (Distillation of the Copaiba with water.)

Prop. Pale straw color; odor of the Copaiba.

Use. The same as Copaiba.

Dose. ♏x. to ♏xxx., triturated with mucilage and water.

COPTIS. U.S. (*Secondary.*) *Trifoliata.* Goldthread. (*Polyand. Polygynia,* N. O. *Ranunculaceæ.* ⊙.) North America.

Prop. Long, thread-like, orange-colored roots; without smell, bitter taste; owes its virtues to a bitter extractive matter, soluble in water and alcohol.

Oper. Tonic.

Use. In all cases where a simple tonic is required. In aphthous affections of the mouth and throat.

Dose. Of the powder, from gr. x. to gr. xxx. Of the tinct. ʒj., (℥j *root,* Oj. *alcohol.*)

CORIANDRUM. U. S.—L. E. Coriandri Sativi Semina, D. Coriander Seed. (Coriandrum *Sativum.* *Pentand.* *Digyn.* N. O. *Umbelliferæ.* Italy. ⊙.)

Prop. Odor aromatic; taste grateful, pungent; seed hemispherical, ribbed.

Oper. Carminative.

Use. In flatulencies; but chiefly to cover the taste of other medicines.

Dose. ℈j. to ʒj. entire, or in powder.

Off. Prep. *Aqua Calcis Comp.*, D. *Infusum Sennæ,* L. E. *Tinct. Sennæ Comp.*, E. *Confectio Sennæ,* L. E.

CORNU. L. E. Cornua Cervina. Ramenta, D. Hartshorn. (Cervus Elaphus. *Mammalia Pecora.* Europe.)

Prop. Hard compact, bony; yields 27 parts gelatine for every 100 of the horn.

Oper. Emollient, nutritive.

Use. To infants deprived of the breast; ℥vj. of the shavings, boiled in Oiv. of water to Oij., then strained, and the liquor again boiled with f℥j. of orange juice, ℥vj. of sugar, and f℥v. of sherry wine, form a light nutritious jelly for the sick.

Off. Prep. *Cornu Ustum.* L. D. *Pulv. Antimonialis,* L. E. D.

CORNU USTUM. L. Burnt Hartshorn.

Comp. Phosphate of lime, carbonate of lime, phosphate of magnesia.

Prop. White, friable.

Use. The knowledge of the components of this preparation proves that it possesses no antacid qualities, and therefore it might be altogether rejected.

CORNUS. FLORIDA. U. S. Circinata, U. S. Sericea, U. S. (Dogwood. Swamp Dogwood. [illegible])

Prop. Taste bitter, astringent, slightly aromatic; odor feeble, contains extractive matter, gum, resin, tannin, and gallic acid, and a peculiar bitter alkaline principle, *cornine*.

Oper. Tonic, astringent.

Use. In all cases to which Peruvian Bark is adapted, which it closely resembles, especially intermittents.

Dose. May be given in powder, decoction, or extract: of the powder, from ℈j. to ʒj. Infusion most employed.

Off. Prep. *Decoct. Cornus Florida*, U. S.

CREASOTON. L. Creasotum, E. Creasote. (A colorless limpid liquid, prepared from the oil of wood-tar.)

Prop. Colorless when recent; spec grav. 1.066; soluble in its weight of acetic acid; leaves no stain on white paper when heated. A powerful stimulant.

Use. Externally applied in rheumatism and neuralgia. Given in some stomachic affections, as dyspepsia, and anorexia, and to allay nausea and vomiting; used externally in porrigo *scutulata*, and to relieve toothache; also to foul ulcers and cancerous sores.

Dose. From ♏iij. to ♏xv.

CRETA. U. S.—L. E. Creta Alba, D. Carbonis Calcis, *a.* [illegible], E. Chalk.

Comp. Lime 55, carbonic acid 45, in 100 parts; some argil. Spec. grav. from 2.3 to 2.6.

Prop. White, friable, effervescing with acids.

Use. To prepare the Creta Præparata.

CRETA PRÆPARATA. U. S.—L. E. D. Prepared Chalk. Take of chalk a convenient quantity; add a little water to it, and rub it into a fine powder; throw this into a large vessel nearly full of water, stir briskly, and after a short interval pour the supernatant liquor, while yet turbid, into another vessel. Repeat the process with the chalk remaining in the first vessel, and set the turbid liquor by, that the powder may subside. Lastly, pour off the water, and dry the powder.—*U. S. Phar.*

Comp. The same as those of creta.

Oper. Internally antacid; externally absorbent.

Use. In diarrhœa from acidity; externally when sprinkled over burns, after the inflammation has subsided, and a poultice applied, the skinning over of the sore is much hastened.

Dose. Gr. x. to ʒj. or more.

Off. Prep. *Mistura Cretæ*, U. S.—L. E. *Hydrargyrum cum Creta*, U. S.—L. *Pulvis Cretæ Comp.*, L. E. *Pulv. Opiatus*, E. *Trochisci Carbonatis Calcis*, E. *Ammoniæ Sesquicarbonas*, L. *Calx*, L. *Calcii Chloridum*, L. *Confectio Aromatica*, L.

CROCUS. U. S.—L. E. Croci Sativi Stigmata, D. Saffron. (Crocus Sativus. *Triand. Monogyn.* N. O. *Iridaceæ.* The East. 4.) *The English is the best.*

Prop. Odor diffusive, aromatic, narcotic; taste aromatic, pungent, bitter; color deep orange-red; residing in an extractive essential oil and resin; yields its virtues to alcohol, wine, vinegar, and water.

Oper. Stimulant, exhilarating, diaphoretic, emmenagogue.

Use. In hysteria and other nervous affections; chiefly to impart color to officinal tinctures.

Dose. Gr. v. to ʒss.

Off. Prep. *Syrupus Croci,* L. E. *Tinct. Croci,* E. *Confectio Aromatica,* U. S.—L. D. *Electuarium Aromat.,* E. *Pilulæ Aloes cum Myrrhæ,* L. E. *Tinct. Aloes Comp.,* U. S.—L. E. D. *Tinct. Cinchonæ Comp.,* U. S.—L. E. D. *Tinct. Rhei,* L. *Tinct Rhei Comp.,* U. S.—L.

CROTONIS OLEI. E. See Tiglii Oleum.

CUBEBÆ U. S.—L. E. D. Cubebs. (Piper *Cubebæ, Diand. Trigyn.* N. O. *Piperaceæ.* Java and Guinea. ♄.) *Baccæ*

Comp. Wax, volatile oil, *cubebin,* resin, chloride of sodium, extractive, lignin. (The *cubebin* is probably identical with *piperin.*)

Prop. Odor aromatic; taste cooling at first, afterwards pungent; active principle an essential oil

Oper. Stimulant, purgative, diuretic.

Use. In gonorrhœa, gleet, leucorrhœa. Also, as a grateful stomachic and carminative in disorders of the digestive organs. *Cubebs* have been recommended in every stage of gonorrhœa, but they are most safe and effectual in chronic cases, and where the inflammation is confined to the mucous membrane of the urethra. If not speedily useful, they should be discontinued.

Dose. From gr. x. to ʒss. of the powder, every six hours. The volatile oil is sometimes substituted in the dose of ten or twelve drops, suspended in mucilage or sugar and water.

CUMINUM. L. E. Cummin Seed. (Cuminum *Cyminum, Pentand. Monogyn.,* N. O. *Umbelliferæ.* Egypt. ☉.)

Prop. Odor peculiar, heavy; taste warm, bitterish, disagreeable. Water extracts their odor; spirit takes up both odor and taste Seeds ovate, striated.

Oper. Antispasmodic; externally stimulating.

Use. Scarcely ever employed internally: vide Emplastrum.

CUPRUM. U. S.—D. Copper.

Prop. Odor peculiar, but sensible only when rubbed; taste disagreeable and metallic; color red yellow; spec. grav. 7.87, ductile; very malleable; hardness less than that of iron; easily oxidized.

Use. For preparing the salts of the metal.*

CUPRI ACETAS. D. Acetate of Copper.

Comp Oxide of copper 39, acid and water 61, in 100 parts; or, 1 protoxide=39.6+1 acid=51.48+9 water=81: eq.=181.08.

Prop. Crystals four-sided truncated pyramids, of a bluish green color, efflorescent: spec. grav. 1.779: taste disagreeably metallic Sparingly soluble in water; moderately soluble in alcohol.

Oper. Tonic, stimulant, escharotic.

Use. In epilepsy, chorea, and other spasmodic affections.

Dose. Gr. ¼ gradually increased to gr. ij.

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*Copper, when clean, produces no deleterious effects in the stomach; nor does it appear that the acids it meets with there and in the bowels render it very active when in a mass. We have seen two instances where halfpence were swallowed, and retained, in the one case six months, and in the other two, without altering the state of health. Both the patients were boys under ten years of age; and the halfpence were much corroded when passed

Incomp. Alkalies, chalk mixture, sulphuric acid.

CUPRI SUBACETAS. U. S.—D. See Ærugo.

CUPRI AMMONIO-SULPHAS. L. Cuprum Ammoniatum, U. S.—E. D. Ammoniated Copper. (*Cupri Sulphatis* ℥j., *Ammoniæ Sesquicarbonatis* ℥jss. Or, take of *Sulphate of Copper* ℥ss., *Carbonate of Ammonia* ʒvj.; rub them together in a glass mortar till effervescence ceases; then wrap the ammoniated copper in bibulous paper, and dry it with a gentle heat. Let it be kept in a well-stopped glass bottle.)—*U. S. Phar.*

Comp. Carbonate of copper, sulphate of ammonia.

Prop. A crystalline powder of a rich violet color; taste hot, styptic, metalline. Its color is lost by keeping, if exposed to the air, and it becomes green; being partly converted into carbonate of copper.

Oper. Tonic, antispasmodic.

Use. In epilepsy and chorea, after a course of purging.

Dose. Gr. ¼ gradually increased to gr. v. in a pill twice a day.

Incomp. Acids, alkalies, lime water.

CUPRI AMMONIO-SULPHATIS LIQUOR. L. Cupri Ammoniati Solutio, E. D. Solution of Ammoniated Copper. (*Cupri Ammonio-Sulph.* ʒj., *Aquæ distillatæ* Oj. Dissolve the ammonio-sulphate of copper in the water, and filter through paper.)

Prop. and *Use.* The same as those of the salt.

CUPRI SULPHAS. U. S.—L. E. D. Sulphate of Copper.

Comp. Hydrate of oxide of copper 42.6, sulphuric acid 33, water 25.4. in 100 pts.; or, 1 eq. protoxide of copper=39.6+1 sulphuric acid=40.1: eq.=79.7.

Prop. Crystals rhomboidal, rich blue, semi-transparent, efflorescing, inodorous; taste harsh, styptic, corrosive; soluble in four parts of water, at 60°; two of water, at 212°.

Oper. Tonic, emetic, astringent, escharotic, alterative, styptic, antispasmodic.

Use. In epilepsy, hysteria, and intermittent fever; and to produce vomiting in incipient phthisis, in croup, and in poisoning; externally as a stimulant to ulcers and to take down fungus. A weak solution is sometimes used as a collyrium in ophthalmia, and as an injection in gleets. It formed the basis of a very unchemical preparation, Bates's Aqua Camphorata, which Ware recommends, diluted with 16 parts of water, in the purulent ophthalmia of infants. The following will answer instead of it: ℞ Cupri sulph. gr. iij., mist. camphoræ f℥v., cola.

Dose. As a tonic, gr. ¼ to gr. ij. in a pill: gr. ij. to gr. x. in f℥ij. of water vomit.

Incomp. Alkalies, earths, and their carbonates; sodæ biboras; salts of lead; acetate of iron; acetate and diacetate of lead; astringent vegetable infusions, decoctions, and tinctures.

Off. Prep. *Solutio Cupri Sulphatis Comp.*, E. *Cuprum Ammoniatum*, U. S.

CURCUMÆ LONGÆ RADIX. D. Curcuma, U. S.—E. The Root of Turmeric. (Curcuma *Longa. Monand. Monogyn.* N. O. *Scitamineæ* India. ♃.) *A tuberose root.*

Prop. Color pale yellow; taste bitter and aromatic; odor slightly aromatic. It tinges the urine reddish, after being taken for a short time.

Oper. Stimulant, tonic.

Use. In debilitated states of the stomach; intermittent fever; dropsy.

Dose. From ʒss. of the powder to ʒij.: three tablespoonfuls, three times a day, of an infusion made with ʒiij. of the root in Oj. of water.

CUSPARÍA. L. E. Augustura:—Bonplandiæ Trifoliatæ Cortex, D. Cusparia Bark. (Galipea *Cusparia* vel *officinalis*. *Pentandria Monogynia*. N. O. *Rutaceæ*. South America. ♄.)

Prop. Odor peculiar; taste intensely bitter, and slightly aromatic; pieces thin, externally grey, wrinkled; internally yellowish fawn; fracture short, resinous. Yields its virtues to water and proof spirit. (*Contains an alkali Cusparin.*) It is distinguished from *false Cusparia* by its outer surface not turning green; nor its transverse fracture red by nitric acid.

Oper. Tonic, stimulant, aromatic.

Use. In dyspepsia, removing flatulence and acidity; chronic diarrhœa, dysentery.

Incomp. Sulphate of iron and of copper, nitrate of silver, tartarized antimony, acetate and diacetate of lead, bichloride of mercury, pure potassa, and infusions of galls and yellow cinchona bark, &c.

Dose. Gr. v. to gr. xx. in powder.

Off. Prep. *Infusum Cuspariæ*, L. *Tinctura Angusturæ*, D.

CYANOGEN. (Bicarburet of Nitrogen.) Obtained by Gay-Lussac, in 1815, by heating *Cyanuret of Mercury*.

Comp. Carbon 46.1, nitrogen 53.9, equiv. carb. 12, nit. 14. Spec. grav. 1.81, compared with atmospheric air; 26 to 1, with nitrogen. Combined with hydrogen, forms *hydrocyanic acid;* burns with a beautiful purple flame; has a pungent odor, somewhat resembling bitter almonds; unrespirable and poisonous.

CYDŌNĬA. L. Quince Seed. (Cydonia *vulgaris*. *Icosandria Pentagynia*, N. O. *Rosaceæ*. Germany. ♄.)

Prop. Shape of the seeds ovate, angled; the coriaceous external coat abounds with mucilage, to obtain which only they are used.

Off. Prep. *Decoctum Cydoniæ*, L.

CYMINUM. L. See Cuminum.

DATURA. See *Extract. Stramonii*, and *Stram. Semina*.

DAUCI FRUCTUS ET RADIX. L. D. Dauci Radix, E. Dauci Sylvestris Semina, D. Carrot Root and Seed. (Daucus *Carota*. *Pentandria. Digynia*. N. O. *Umbelliferæ*. Exotic. ♂.)

Prop. The root is sweet and mucilaginous; the seeds have an aromatic odor, and a moderately warm pungent taste

Oper. Of the root, emollient; of the seeds, stomachic, carminative, diuretic. The root is externally antiseptic.

Use. The root is chiefly employed as a poultice to fetid and ill-conditioned sores. The seeds have very little efficacy in gravel and other renal affections, for which they have been extolled.

Dose. Of the bruised seed ℈ij. to ʒj.

DECOCTUM ALŌES COMPOSĬTUM. L. D. Decoctum Aloes, E. Compound Decoction of Aloes. (*Ext. Glycyrrh.* ℥ vij., *Potassæ Carb.* ʒj., *Aloes contritæ*, *Myrrhæ* contri., Croci [illegible]. ʒjss., *Tinct. Card. Co.* f℥vij., *Aquæ* Ojss. Boil to Oj. and strain, then add the *Tinct. Card. Comp*)

Comp. The soluble matter of the Aloes and Myrrh dissolved in water, which is enabled, by the alkali, to take up a little more than the water alone could do. The tincture keeps it unchanged.

Oper. A warm cathartic; emmenagogue, tonic, and cordial.

Use. In habitual costiveness from torpor of the bowels; in jaundice, hypochondriasis, chlorosis, and dyspepsia. This is a very mild and useful laxative where tonics are co-indicated. It may be used with the greatest advantage in some forms of dyspepsia, and in those complicated cases in which suppressed menstruation is connected with enfeebled digestion and a languid state of the bowels, as in chlorosis.

Dose. f℥ss. to f℥ij. taken in the morning.

Incomp. Acids and acidulous salts, metallic salts.

DECOCTUM ALTHÆÆ OFFICINALIS. D. Decoction of Marsh Mallows. (*Rad. Althææ sic.* ℥iv., *Uvarum Pass. demptis acin.* ℥ij., *Aquæ* Ovij. Boil to five pints and decant.)

Comp. The clear liquor, which is poured off after the fæces subside, is a solution of mucilage in water.

Prop. Odor peculiar, not unlike that of boiled turnips; taste sweetish; color pale yellow; slightly viscid.

Oper. Demulcent, emollient.

Use. In nephritis and inflammation of the bladder; and as a fomentation in abrasions, &c.

DECOCTUM AMYLI. L. Decoction of Starch. (*Amyli* ʒiv., *Aquæ* Oj.; rub the starch, gradually adding the water, then boil a little.)

Use. For glysters.

DECOCTUM CALUMBÆ COMPOSITUM. U.S. Compound Decoction of Calumba. (*Calumbæ contusæ, Quassiæ in scobes rasæ*, āā ʒij., *Aurantii corticis* ʒj., *Rhei in pulv.* ℈j., *Potassæ carbonatis* ʒss., *Aquæ* f℥xx. Boil to a pint, and add T. Lavand. f℥ss.)

Oper. Tonic.

Use. In convalescence from fever.

Dose. f℥ij. thrice a day.

DECOCTUM CETRARIÆ. U. S.—L. Decoctum Lichenis Islandici, D. Decoction of Liverwort. (*Lichenis* ʒv. L. *Aquæ* Ojss. L. Boil to Oj. and strain.)

Comp. Bitter extractive, and fecula, dissolved in water.

Prop. Inodorous; taste bitter, mucilaginous; color yellow.

Oper. Tonic, demulcent.

Use. In protracted coughs, phthisis, emaciation from the great discharge of ulcers, pertussis.

Dose. fʒiv. to f℥ij. three or four times a day. The bitter is completely extracted by steeping the lichen in several waters before it is boiled, adding to each water about half a scruple of carbonate of potassa. Its nutritive qualities are considerable.

DECOCTUM CHAMÆMELI COMP. D. Decoction of Chamomile. (*Flor. Anthem. Nob.* ℥j., E. ℥ss., D. *Sem. Carui* ʒiv., E. *Sem. Fœniculi* ʒij., D. *Aquæ* ℔v., E. Oj., D. Boil for fifteen minutes and strain.)

Comp. Bitter extractive, dissolved in water.

Use. As a clyster and fomentation; but for the latter purpose warm water is equally efficacious.

DECOCTUM CHIMAPHILÆ. U.S.—L. Decoction of Winter Green. (*Chimaphilæ* ℥j., *Aquæ dist.* Ojss. Boil to a pint, and strain.)

Oper. Diuretic.

Use. In dropsy, calculous and nephritic complaints.

Dose. From f℥j. to f℥jss.

DECOCTUM CINCHONÆ CORDIFOLIÆ. DECOCTUM CINCHŌNÆ LANCIFOLIÆ. L. Decoctum Cinchonæ, U.S.—E.D. Decoction of Cinchona. (*Cinchoniæ Cort. contusi* ʒx., *Aquæ* Oj., L.D. ℥j. *Corticis*, f℥xxiv. *Aquæ*, E. Boil for ten minutes in a slightly covered vessel, and strain while hot, L.D. Filter when cool, and evaporate to f℥xvj., E.)

Comp. Cinchonia, Quina, as Bikinates, and resinous extractive dissolved in water.

Prop. Odor and taste that of the species of bark employed.

Oper. The same as that of the bark.

Use. When the powder does not sit easy on the stomach; and when large doses are necessary, or ingredients of a nature which cannot be combined with the powder are required to be given with the bark.

Dose. f℥j. to ℥iv. three or four times a day.

Incomp. Tartarized antimony, infusions of astringent barks.

DECOCTUM CINCHŌNÆ OBLONGIFOLĬÆ. L. Decoction of Red Bark.

Use. In gangrene and general debility.

DECOCTUM CORNUS FLORIDÆ. U.S. Decoction of Dogwood. (*Corn. Florid. cont.* ℥j., *Aquæ* Oj.) Boil for ten minutes in a covered vessel, and strain the liquor while hot.

Oper. Tonic.

Use. As a tonic in dyspepsia, and intermittents, especially when Peruvian bark cannot be had.

DECOCTUM CYDONĬÆ. L. Decoction of Quince Seed. (*Cydoniæ Sem.* ʒij., *Aquæ* Oj. Boil over a gentle fire ten minutes, and strain.)

Comp. A solution of mucilage in water.

Prop. Inodorous; taste slightly grateful; nearly colorless; transparent; viscid.

Oper. Demulcent.

Use. In aphthæ, united with borax and honey, or syrup of mulberries; injected beneath the eyelids in violent ophthalmia. Perhaps altogether superfluous, as it does not keep.

Incomp. *Acids*, which coagulate it.

DECOCTUM DULCAMARÆ. U.S.—L.E.D. Decoction of Woody Nightshade. (*Dulcamaræ Caulis concisi* f℥x., *Aquæ* Ojss. Boil to one pint, and strain, L. *Dulcamaræ contusæ* ℥j., *Aquæ* f℥xxiv. Boil, and evaporate to f℥xvj. E.)

Comp. Contains a peculiar alkaline principle, *solania*, which does not form crystallizable salts.

Prop. Odor strong and unpleasant; taste bitter and nauseous, followed by a degree of sweetness. (Contains *Solania.*)

Oper. Diuretic, diaphoretic, alterative, narcotic.

Use. In dropsy, rheumatism, humoral asthma, lepra, and some other diseases of the skin.

Dose. f ʒ iv. to f ℥ j. with any aromatic tincture, twice or thrice a day.

DECOCTUM GEOFFRÆÆ INERMIS. D. Decoction of Cabbage-Tree Bark. (*Cort. Geoff. Inerm. in Pulv.* ℥ j., *Aq.* Oij Boil over a slow fire to one pint, and strain.)

Prop. Odor disagreeable; taste bitter and mucilaginous; color that of Madeira wine.

Oper. Anthelmintic, purgative, narcotic.

Use. In worms, in which it has been found very efficacious.

Dose. To children f ʒ ij., to adults f ℥ ss. to f ℥ ij. An overdose, or the drinking cold water during its operation, produces violent vomiting, fever, and delirium. These effects are to be remedied by castor oil, warm water, and acids.

DECOCTUM GLYCYRRHIZÆ. D. Decoction of Liquorice. (*Radicis Glycyrrhizæ contusæ* ℥ jss., *Aquæ mensura* ℔j. Boil for ten minutes, and strain.)

Use. An agreeable demulcent, and vehicle for the administration of other remedies.

DECOCTUM GRANATI. L. Decoction of Pomegranate. (*Granati* ℥ ij.. *Aquæ distillatæ* Ojss. Boil to a pint, and strain.)

Prop. Contains tannic acid, extractive, gum.

Oper. Astringent, anthelmintic.

Use. In tape-worm, dysentery.

Dose. f ℥ ss. to f ℥ j.

DECOCTUM GUAIĀCI. E. D. Decoction of Guaiacum, or of the Woods. (*Scob. Ligni Guaiaci* ℥ iij., *Fruct. Sic. Vitis Viniferæ* ℥ ij., *Rad. Lauri Sassafras con.*, *Rad. Glycyrr. con.*, *sing.* ℥ j., *Aquæ* Oviij. Boil the Guaiacum and Raisins with the water over a slow fire, to five pints, adding the roots towards the end, then strain.)

Oper. Stimulant, diaphoretic.

Use. In venereal complaints, scrofula, cutaneous diseases, and rheumatism, after bleeding. The guaiacum, however, can have little effect, as the resin is insoluble in water.

Dose f ℥ iij. to f ℥ vi. every three hours, so that Oj. or Oij. may be daily taken.

DECOCTUM HÆMATOXYLI. U. S.—E. D. Decoction of Logwood. (*Ramentorum Ligni Hæmatoxyli* ℥ j., *Corticis Cinnamomi contusi* ʒ j.. *Aquæ* Oj. Boil the wood in the water till it evaporates to f ℥ x.; towards the end of the coction add the cinnamon, then strain.)

Prop. Taste sweetish, subastringent; nearly inodorous; color deep red.

Oper. Tonic, astringent.

Use. In diarrhœa, and some cases of dyspepsia, where the secretions of the intestines are acrid.

Dose. f ℥ j. to f ℥ iij. frequently.

Incomp. The mineral acids, solution of alum, sulphates of iron and of copper, acetate of lead, tartarized antimony.

Off. Prep. *Ext. Hæmatoxyli*, U. S.—L. D.

DECOCTUM HORDĔI. U. S.—L. D. Hordei Mistura, E. Decoction of Barley. (*Hordei Sem.* ℥ ijss., *Aquæ* Oivss. First wash the barley well, then boil it for a few minutes in Oss. of the water; which being strained off, and thrown away, add the remainder boiling; boil to two pints, and strain.)

Oper. Nutritive, demulcent

Use. As a diluent in febrile affections, recent gonorrhœa, and strangury; and to form the bulk in clysters.

Dose. Ad libitum.

DECOCTUM HORDEI COMPOSĬTUM. L. D. Compound Decoction of Barley. (*Decoct. Hord.* Oij., *Caricæ Fruct. concisi* ℥ ijss., *Glycyrrh. Rad. concisæ et contusæ* ʒ v., *Uvarum Pass.* ℥ ijss., *Aquæ* Oj. Boil to two pints, and strain.)

Oper., *Use*, and *Dose.* The same as the former; its laxative effect, which may be sometimes hurtful, is obviated by a few drops of tincture of opium.

DECOCTUM MALVÆ COMPOSĬTUM. L. Compound Decoction of Mallow. (*Malvæ exsic.* ℥ j., *Anthemidis Flor. exsic.* ℥ ss., *Aquæ* Oj. Boil for fifteen minutes, and strain.)

Comp. Bitter extractive and mucilage in water.

Use. For the purpose of clysters and fomentations.

DECOCTUM MEZERĔI. E. D. Decoction of Mezereon. (*Cort. Rad. Daphnes Mezer.* ʒ ij., *Rad. Glycyrrh. contus.* ℥ ss., *Aquæ* Oij. Boil over a gentle fire to Oiss., and strain.)

Comp. The acrid principle of the mezereon (*Daphnina*), and the saccharine mucilage of the liquorice root, dissolved in water.

Oper. Stimulant, diaphoretic, alterative.

Use. In secondary syphilis, over which, however, it possesses little or no power; glandular swellings, chronic rheumatism.

Dose. f℥ iij. to ℥ vj. three or four times a day.

DECOCTUM PAPAVERIS. L. E. D. Decoction of Poppy. (*Papav. Somniferi Capsul. concis.* ℥ iv., *Aquæ* Oiv. Boil for fifteen minutes, and strain.)

Comp. Bimeconate of morphia, and the other soluble salts of opium, with mucilage, extractive, &c., in water.

Prop. Anodyne, emollient.

Use. As a fomentation in painful swellings, excoriations arising from the thin, acrid discharge of ulcers, and those common to infants.

DECOCTUM PYROLÆ. D. Decoction of Winter Green. (*Pyrolæ Umbellatæ* ℥ j., *Aquæ mensura* ℔ij. Macerate for six hours, then bruise and return the Pyrola to the liquor, and reduce the mixture by evaporation, when strained and expressed, to ℔j. by measure.)

Prop. Taste bitter.

Oper. Diuretic, tonic.

Use. In ascites and other dropsies; acute rheumatism and hysteria.

Dose. f℥ j. to f℥ ij. three times a day.

DECOCTUM QUERCŬS. (Albæ.) U. S.—L. E. Decoction of Oak Bark. (*Quercus Cort.* ʒ x., *Aquæ* Oij. Boil to a pint, and strain.)

Oper. Astringent.

Use. As an injection in leucorrhœa, and the gleety discharge which frequently remains after miscarriages; a fomentation in local vitiated ulcer; an application to warts.

Incomp. Decoction of cinchona; gelatine; metallic salts; alkalies destroy its astringency.

DECOCTUM SARSÆ. L. E. D. Decoction of Sarsaparilla. (*Sarsaparillæ Rad concis.* ℥ v., *Aquæ ferv.* Oiv. Macerate for four hours near the fire in a slightly covered vessel; then bruise the root, and macerate again for two hours; then boil to 0ij and strain.)

Comp. Parilline? bitter extractive, and mucilage in water.

Prop. Inodorous; taste bitter, glutinous.

Oper. Slightly diaphoretic and tonic; demulcent.

Use. In the sequelæ of syphilis after a mercurial course.

Dose. f℥iv. to 0ss. twice or thrice a day alone, or united with milk.

Incomp. Lime water, acetates of lead.

DECOCTUM SARSÆ COMPOSITUM. U.S.—L.E.D. Compound Decoction of Sarsaparilla. (*Decocti Sarsaparillæ ferv.* 0iv., *Sassafras Rad. concisæ, Guaiaci Ligni rasi, Glycyrrh. Rad. cont., sing.* ʒ x., *Mezerei* ʒ iij. Boil fifteen minutes, and strain.) Or, take of *Sarsaparilla* ℥ vj., *Water* 0iv.; add the other ingredients, and proceed in the same manner.—*U. S Phar.*

Oper. Diaphoretic, alterative.

Use. The same as the former; in secondary syphilis; chronic rheumatism, and lepra.

Dose. f℥iv. to f℥ vj. twice or thrice a day.

⁂ This preparation is similar to the celebrated *Lisbon Diet Drink.*

DECOCTUM SCILLÆ. U. S. Decoction of Squill. (*Scillæ* ʒ iij., *Juniperi* ℥ iv., *Senegæ* ℥ iij., *Aquæ* 0iv. Boil to one half, then strain, and add *Spiritus Ætheris Nitrici* f℥ iv.)

Oper. Diuretic.

Use. Dropsy.

Dose. From f℥j. to f℥ ij. frequently repeated.

DECOCTUM SCOPARII COMPOSITUM. L. Decoctum Scoparii, E. Compound Decoction of Broom. (*Scoparii, Juniperi fructus, Taraxici,* ā ā ʒ iv., *Aquæ distillatæ* 0jss. Boil to a pint, and strain.)

Oper. Diuretic.

Use. In dropsy.

Dose. f℥ ss. three times a day.

DECOCTUM SENEGÆ. U. S.—L. E. D. Decoction of Senega. (*Senegæ Rad.* ʒ x., *Aquæ* 0ij. Boil to 0j., and strain.)

Prop. Inodorous; taste hot and pungent; color brown olive.

Oper. Diuretic, purgative, stimulant, expectorant.

Use. In dropsy, rheumatism, and affections of the lungs, attended with debility. Also, in bronchitis where expectoration is scanty, and in croup, amenorrhœa, asthma, and scrofula.

Dose. f℥ jss. to f℥ iij. three or four times a day.

DECOCTUM TARAXICI. U. S.—E. D. Decoction of Dandelion. (*Taraxici recentis herbæ et radicis* ℥ vij., *Aquæ* ℔ij Boil to ℔j., and then strain.)

Prop. Taste bitter.

Oper. Purgative, tonic.

Use. In deficient and irregular action of the hepatic organs

Dose. f℥ j. to ℥ ij. twice or thrice a day.

DECOCTUM TORMENTILLÆ. L. Decoction of Torment. . (*Tormentillæ cont.* ℥ ij., *Aquæ dist.* 0jss. Boil to 0j., and strain.)

Comp Tannic acid, extractive in solution.

Use. In diarrhœa, and as an injection in leucorrhœa.

Dose. f℥j. to f℥iss. three or four times a day.

Incomp. Chalk mixture, alkalies, ipecacuanha, all metallic salts, opium.

DECOCTUM ULMI. L. D. Decoctum Ulmi Campestris, E. Decoction of Elm Bark. (*Ulmi cort. recent. contusi* ℥ijss., *Aquæ* Oij. Boil to Oj. and strain.

Prop. Odor faint; taste slightly bitter; color brown.

Oper. Diuretic, alterative, demulcent, nutritious.

Use. In lepra and herpetic eruptions. Willan thinks it has little efficacy. I have ascertained that it is equal to Decoction of Sarza.

Dose. f℥iv. to ℥vj. twice or thrice a day.

Incomp. Alcohol and tinctures in any considerable quantity.

DECOCTUM VERÄTRI. L. D. Decoction of White Hellebore. (*Veratri Rad. cont.* ʒx., *Aquæ dist.* Oij., *Spir. Rect.* f℥iij. Boil the watery decoction to Oj., and when it is cold add the spirit.) *Decoctum Hellebori Albi.*

Oper. Stimulant, acrid, cathartic.

Use. The violent operation of Veratrum confines it to external use. This decoction is employed, with benefit, in scabies, tinea capitis, and other foulnesses of the skin. It requires to be diluted when the skin is very irritable.

DECOCTUM UVÆ URSI. U. S.—L. Decoction of Whortleberry. (*Uvæ Ursi cont.* ℥j., *Aquæ dist.* Ojss. Boil to a pint, and strain.)

Comp. Chiefly tannic and gallic acid.

Oper. Astringent, diuretic, antilithic.

Use. In hæmorrhages of the prostate gland and the intestinal canal, gravel, chronic nephritis, diabetes, and all diseases of the urinary organs.

Dose. f℥j. to f℥ij. three times a day.

Incomp. Ipecacuanha, opium, infusion of cinchona bark, alkalies.

DELPHININA. Delphine. An alkaloid principle, discovered in 1819 by Lassaigne, in the seeds of the *Delphinium Staphisagria*, in which it is united with acetic acid. Europe, Levant. (Submit the uncleaned seeds, well bruised, to the action of weak sulphuric acid; precipitate the liquor by ammonia, and redissolve in alcohol the delphinine, which is still slightly colored. To purify it, draw off the alcohol by distillation, dissolve the residuum in muriatic acid, and boil with magnesia.)

Prop. White, pulverulent, devoid of smell; applied to the nose, occasions sneezing; taste acrid and bitter; slightly soluble in water, readily in alcohol and æther; combines with acids, forming neutral salts, which possess much bitterness and acridity

Oper Acro-narcotic poison; alterative; senso-paralysant; employed externally.

Use. Tic doloureux, paralysis, rheumatism, neuralgia, amaurosis.

Dose. From gr. x. to gr. xxx. to ℥j. of lard, or the same quantity to ℥j. of alcohol, applied by friction to the part affected until there is a distinct sensation of heat and pricking.

DIANTHI CARYOPHYLLI FLORES. D. Clove Pink, or Clove Gillyflower. (*Decand. Digyn.* Italy. ♃.) *Caryophyllæ rubra.*

Prop. Odor grateful, similar to that of cloves; taste bitterish, sub-astringent.

Oper. Aromatic.

Use. Discarded by judicious practitioners.

Incomp. Sulphate of iron, alkalies, acids.

DIGITALIS FOLIA ET SEMINA. L. Digitalis, U. S.—E. Digitalis Purpureæ Folia, D. Purple Foxglove Leaves. (Digitalis Purpurea. *Didynam. Angiosperm.* N. O. *Scrophulariaceæ.* Exotic. ♂.) *Digitalis herba.*

Comp. Chlorophylle, resin, fatty matter, starch, vegetable fibre, gum, tannin, volatile oil, salts of lime, and potassa. The properties of the plant are chiefly due to the resin.

Prop. Inodorous; taste acrimonious, bitter, nauseous; injured by light, both in color and virtues. The leaves should be collected in July, and dried without heat.

Oper. Stimulant, but afterwards sedative, diminishing the energy and force of the pulse, and lessening the irritability; diuretic, narcotic. In overdoses it occasions vomiting, purging, dimness of sight, vertigo, delirium, hiccough, convulsions, and death. These symptoms of poisoning are obviated by cordials, opium, and blisters, especially brandy and ammonia.

Use. In inflammatory diseases; phthisis; active hæmorrhages; and dropsies, unattended by palsy and unsound viscera; from its influence in lowering the pulse, digitalis has been much employed in palpitation and other affections of the heart, in mania, epilepsy, &c.; also, as an antispasmodic in pertussis and spasmodic asthma; but particularly when combined with nitric acid, in dropsies which occur after long and harassing courses of mercury: most useful where there is a laxness of fibre, pale countenance, intermittent, weak pulse, cold skin, and when the swelling pits. This state may be produced by bleeding, saline purges, &c. When nausea occurs, its use must be intermitted for a little time; but we are not of opinion that purging counteracts its desired effects, for, although the kidneys may not act so powerfully, yet the body is unloaded of the morbid fluid by the intestines. Its use must be followed by a generous diet, and tonics; and, during its employment, diluents are necessary.

Dose. Gr. j. to gr. iij. in a pill, united with ammoniacum, soap, calomel, or opium, every six or eight hours, till the remedy acts on the kidneys, when it must be discontinued, or the intervals extended: but it may again be given, after an interval. (See Infusion of Digitalis.)

Off. Prep. Infusum *Digitalis*, D. *Infusum Digitalis*, L. E. [illegible] Digitalis, L. E. D.

[illegible] S.—L. Backu, E. Diosmæ Crenatæ (*Buchu*), [illegible] leaves of Diosma Crenulata. *Pentandria Monogynia.* [illegible] Cape of Good Hope. ♃.)

[illegible] and aromatic, resembling peppermint; odor [illegible] leaves are stiff, of a yellow olive hue on [illegible] and rugose on the lower; studded with [illegible] glands.

[illegible] and catarrhal affections, affections of [illegible] rheumatism, gout, and [illegible] of the bladder.

[illegible] E. *Tinct. Buchu*, E.

[illegible]

DIOSPYROS. U. S. (*Secondary.*) Persimmon. Diospyrus Virginiana. (*Diœcia, Octandria,* N. O. *Ebenaceæ. Mich. Indigenous.* The Bark. ♄.)

Prop. A common tree in the Middle and Southern States, but does not flourish beyond the forty-second degree of north latitude. Flowers in May and June: fruit ripens about the middle of autumn. Fruit globular, of a dark yellow color; when ripe, containing numerous seeds in a soft, yellow pulp.

Oper. Astringent, tonic.

Use. The decoction of the bark, in intermittents, and in the form of a gargle in ulcerated sore throat. The fruit, when green, is excessively astringent, and the juice may be advantageously employed where an astringent effect is desired.

DRACONTIUM. U. S. (*Secondary.*) Dracontium Fœtidum, *Wild.* Ictodes Fœtidus, *Bigelow.* Sympto-carpus Fœtidus. *Barton.* Skunk Cabbage. (*Tetrandria Monogynia.* N. O. *Aroideæ. Indigenous.* The Root. ⊙.)

Prop. Disagreeable, fetid odor, like that of the polecat; taste acrid, producing a prickling, smarting sensation in the mouth and throat; properties, owing to a volatile oil, dissipated by heat, decoction, time, and exposure.

Oper. Stimulant, antispasmodic, expectorant, narcotic.

Use. In asthma, chronic catarrh, rheumatism, hysteria, epilepsy, hooping-cough, and dropsy. In large doses it occasions nausea and vomiting, with headache, vertigo, and dimness of vision.

Dose. Gr. x. to gr. xx. of the powdered root three or four times a day. It may also be given in infusion or syrup, in doses of from fʒj. to fʒiv.

DULCAMÂRA. U. S.—L. E. Dulcamara; Stipites Autumno Collecti, D. Woody Nightshade Twigs. (Solanum Dulcamara. *Pentand. Monogyn.* N. O. *Solanaceæ.* Indigenous. ♄.)

Prop. Dried, inodorous; taste bitter, followed by sweetness.

Oper. Diuretic, sudorific, narcotic, alterative.

Use. In chronic rheumatism, humoral asthma, dropsy, lepra; scrofula and jaundice.

Dose. ℈j. to ʒj. in powder: in the form of extract, gr. v. to gr. x. An overdose produces vomiting and delirium.*

Off. Prep. *Decoctum Dulcamaræ,* U. S.—L. *Ext. Dulcamaræ,* U. S.

ELATĒRĪUM. U. S.—L. E. D. Fecula of the Wild Cucumber. (*Monœcia Monadelph.* N. O. *Cucurbitaceæ.* South of Europe. ⊙.)

Comp. Elateria, bitter principle, fecula, woody fibre, saline matters.

Prop. Inodorous; taste scarcely bitter, acrid, of a pale greyish-green color. A concentrated alcoholic solution poured into hot diluted Liq. Potassæ, deposites minute, silky-white crystals, 1-7th the weight of the Elaterium.

Oper. Violently cathartic; hydragogue; diuretic.

Use. In dropsies.

Dose. Gr. 1-10th to gr. ¼ in a pill, or ⅛ gr. every hour till it operates; or gr. j. dissolved in ℥j. alcohol, with four drops of nitric acid, of which from thirty to forty drops may be given in water.

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* The influence of Dulcamara is regulated by the soil and temperature of the climate where the plants grow: the warmer the better

Off. Prep. *Extractum Elaterii.* L. E. D.

ELECTUARIÆ. See *Confectiones* and *Conservæ.*

ELECTUARIUM CATECHU. E. D. Electuary of Catechu. (*Catechu* ℥iv., *Kino* ℥iv., *Cort. Cinnam.*, *Nucis Myrist Mosch.*, *sing* ℥j., *Opii in Vini Albi Hispani q. ss. diffusi* ʒjss *Syr. Rosæ Gall. ad Mellis spis.* Boil to ℔ij. ʒiij. contain gr. j. of opium.)

Oper. Astringent, cordial.

Use. In diarrhœas from weak bowels; and where an astringent stimulant can be applied.

Dose. ℈j to ʒj. as a bolus; or dissolved in any fluid.

ELEMI. L. E. Amyris Elemifera; Resina, D. Elemi. (Amyris Elemifera *Octand. Monogyn.* N.O. *Amyrideæ.* Carolina. ♄.)

Comp. Resin, volatile oil.

Prop. Odor fragrant, strong; taste bitter. In large solid masses of a yellow and greenish color, semi-transparent; fusible, soluble in alcohol, partly also in essential oil.

Oper. Stimulant.

Use. Scarcely ever used internally; but chiefly for forming a pleasant digestive ointment, for promoting the discharge from blisters, issues, and setons.

Off. Prep. *Unguentum Elemi,* L. D.

EMETINA. Emeta. F. (Take of powdered root of ipecacuanha, any quantity; digest it several times in æther, at 60° Fahr.; and then in alcohol. Evaporate the alcoholic tincture in a water bath, and dissolve the residue in cold water; then add magnesia, and macerate; and, after drying the magnesian precipitate, digest it in pure alcohol, and evaporate the solution to dryness.)

Prop. Nearly inodorous; taste slightly bitter; white; pulverulent when pure; permanent in the air; scarcely soluble in water; soluble in æther and alcohol.

Comp. Carbon 64.37, nitrogen 4.86, hydrogen 7.77, oxygen 23, in 100 parts.

Oper. Emetic, narcotic, purgative.

Use. In all cases in which ipecacuanha may be used.

Dose. From gr. ¼ to gr. iij. in any bland fluid.

Incomp. Preparations of nut-galls, and all vegetable astringent infusions or decoctions.

Prep. *Syrupus Emetinæ.*

EMPLASTRUM AMMONIACI. U. S.—L. E. D. Ammoniacum Plaster. (*Ammoniaci pur.* ℥v., *Aceti distillati* f℥viij. After dissolving the Ammoniacum, the Plaster is formed by evaporating the mixture, constantly stirring to a proper consistence.)

Prop. Adhesive.

Oper. Stimulant, resolvent.

Use. To scrofulous tumors, bronchocele, white swelling, rheumatism.

EMPLASTRUM AMMONIACI CUM HYDRARGYRO. L. Emplastrum Ammoniaci et Hydrargyri, E. D. Ammoniacum Plaster with Mercury. (*Ammoniaci* ℔j., *Hydrarg.* ℥iij. *Olei*

Olivæ f℥j., *Sulphuris* gr. viij. Add the sulphur to the oil heated, stirring constantly, until they combine, then rub the mercury with them until the globules disappear; lastly, add the ammoniacum melted, and mix.)

Oper. Resolvent, discutient.

Use. To indurated glands, hydrarthus, nodes, tophi, bronchocele, and indolent tumors.

The mercury is in the state of a protoxide.

EMPLASTRUM AROMATICUM. D. Aromatic Plaster. (*Thuris* ℥iij., *Ceræ Flavæ* ℥ss., *Pulv. Cort. Cinnamomi* ʒvi., *Ol. Ess. Pimentæ, Ol. Ess. Limonum, sing.* ʒij. Melt the frankincense and wax together, and strain; then add, as it cools, the cinnamon, previously rubbed with the oils, and form a plaster.)

Oper. Stimulating.

Use. Applied over the stomach for the pains of that viscus, to allay vomiting, and expel flatus. It requires to be frequently renewed, being not very adhesive.

EMPLASTRUM ASSAFŒTIDÆ. U. S.—E. Assafœtida Plaster. (*Emp. Oxidi Plumbi Semivitrei, Assafœtidæ, sing.* ℥ij., *Galbani, Ceræ Flav., sing.* ℥j. The *U. S. Phar.* directs to take *Assafœt., Lead Plaster,* āā ℔j., *Galbanum, Yellow Wax,* āā ℔ss., *Diluted Alcohol* Oiij. Dissolve the *Assafœtida* and *Galban.* in the alcohol, in a warm bath; strain while hot, and evaporate to the consistence of honey; then add the lead plaster and wax, previously melted together; stir well, and evaporate to the proper consistence.)

Oper. Antispasmodic, anodyne.

Use. In flatulence and hysteria, applied over the umbilical region.

EMPLASTRUM BELLADONNÆ. U. S.—L. E. D. Plaster of Belladonna. (*Emplastri Resinæ* ℥iij., *Extracti Belladonnæ* ℥jss.)

Oper. Sedative, anodyne.

Use. In chronic rheumatism, and local pains.

EMPLASTRUM CALEFACIENS. D. Emplast. Picis cum Cantharide, U. S. Warming Plaster. Calefacient Plaster. (*Emplast. Cantharidis partem unam, Picis Burgund. partes septem.* Melt together, and form into a plaster.)

Oper. Calefacient, rubefacient, stimulant.

Use. In catarrh, pertussis, inflammatory affections of the chest, and sciatica.

EMPLASTRUM CANTHARIDIS. L. E. Emplast. Cantharidis, U. S.—D. Cerate of Spanish Flies. Plaster of the Spanish or Blistering Fly. (*Cantharidis in pulv. sub.* ℔j., *Emp. Ceræ* ℔jss., *Adipis* ℔ss. Melt the plaster and lard together, and as the mixture becomes thick in cooling, sprinkle in the flies and mix.) Or, take of finely powdered *Spanish Flies* ℔j., *Yellow Wax, Resin, Lard,* each ℥viij.; mix and stir till cool. —*U. S. Phar.*

Oper. Epispastic.

Use. In every case where blisters are required. Heat destroys the acrimony of the flies, and therefore this plaster fails when incautiously prepared. It should be spread on leather, for a plaster, with the thumb, and never with a hot spatula; perhaps the most certain means of raising blisters would be to sprinkle the finely powdered flies on some farinaceous paste, as suggested by Parmentier. In using this plaster, the part which it is to cover should be bathed with vinegar; and a piece of thin gauze pressed down on the surface of the plaster interposed between it and the skin, by which means it is easily and cleanly removed It requires to remain applied twelve hours in order to produce a perfect blister.

EMPLASTRUM CANTHARIDIS COMPOSITUM. E. Compound Plaster of Spanish Flies. (*Resinæ Liq. Pini Laricis* ℥ivss., *Picis Burgundicæ, Cantharidis, sing.* ℥iij., *Ceræ F.* ℥j., *Subacetatis Cupri* ℥ij., *Sinapis Albæ, Fruct. Piper. Nig., sing.* ℥ss. Melt the pitch and wax, then add the turpentine; and as these cool, sprinkle in the other substances in the form of powder, so as to make a plaster.) *Emplastrum Vesicatorium.*

Oper. Powerfully stimulant, vesicant.

Use. The same as the former; but supposed to be more certain and quicker in producing its effects; hence useful in gout and cramps in the stomach.

EMPLASTRUM CERÆ. L. Emplastrum Simplex, E. Wax Plaster. (*Ceræ Flavæ, Sevi, sing.* ℔iij., *Resinæ* ℔j. Melt them together, and strain.)

Oper. Irritative, drawing.

Use. Intended for supporting the discharge from a blistered surface; but, owing to the irritation it induces, now seldom employed.

Off. Prep. *Emplastrum Cantharidis*, L.

EMPLASTRUM FERRI. U. S.—E. Plaster of Red Oxide of Iron: Strengthening Plaster. (*Emplast. Oxidi Plumbi Semivit.* ℥iij., *Resinæ Pini* ʒvj., *Ceræ Fl.* ʒiij., *Olei Olivæ Europ.* ʒiijss., *Oxidi Ferri Rubri* ℥j. Rub the red oxide of iron with the oil, and add the other ingredients melted. Or, ℞ *Sub. Carb. Ferri* ℥iij., *Emp. Plumbi* ℔ij., *Picis Burgund.* ℔ss. M. —*U. S. Phar.*) *Emplastrum Roborans.* Iron Plaster. U. S.

Oper. Strengthening, stimulant.

Use. In muscular relaxations; and in weaknesses of the joints after sprains. It acts chiefly in giving a mechanical support, by its stiffness and adhesive quality.

EMPLASTRUM GALBANI. (Compositum, U. S.)—L. D. Galbanum Plaster. (*Galbani* ℥viij., *Emplastri Plumbi* ℔iij., *Terebinthinæ Vulgaris* ʒx., *Abietis Resinæ contritæ* ℥ij. Melt the galbanum and turpentine together, then first add the pine resin, and afterwards the plaster, melted with a gentle heat, and mix all together.)

Oper. Stimulant, suppurative.

Use. To scrofulous tumors; old arthritic joints; and to the lumbar regions in rickets. For the purposes of a digestive in discharged abscesses, when induration remains.

EMPLASTRUM GUMMOSUM. E. Gum Plaster. (*Emplast Oxidi Plumbi Semivit. Ammoniaci* ℥iv., *Galbani, Ceræ Flavæ, sing.* ℥ss.)

Oper. and *Use.* The same as the two former.

Off. Prep. *Emplastrum Saponis*, E.

EMPLASTRUM HYDRARGYRI, (*Protoxidi*). U. S.—L. E. Mercurial Plaster. (*Hydrarg.* ℥iij., *Olivæ Olei* ʒi., *Emplastri Plumbi* ℔j., *Sulphuris* gr. viij. Rub the sulphur with the heated oil, stirring constantly until they unite, then rub the mercury with them until the globules disappear; lastly add gradually the lead plaster melted with a slow fire, and mix the whole together. The U. S. Phar. directs to take, *Hydrarg.* ℥ vj., *Ol. Oliv.*, *Resinæ*, ā ā ℥ ij., *Emp. Plumbi* ℔j.) *Emplastrum Lithargyri cum Hydrargyro.*

Oper. Stimulant, resolvent, discutient.

Use. To buboes and venereal tumors; nodes, when not painful to the touch and indurations; and to joints affected with syphilitic pains.

EMPLASTRUM OPII. U. S.—L. E. D. Opium Plaster. (*Opii dur. cont.* ℥ ss.,[*] *Abietis Resinæ cont.* ℥ iij., *Emplast. Plumbi* ℔j., *Aquæ* f℥ viij. To the plaster melted add the resin, the opium, and the water, and boil the mixture with a slow fire to a proper consistence.)

Oper. Anodyne, stimulant.

Use. Against internal pains. Although it is undoubtedly certain that opium, in that state of minute division in which it exists in the tincture, produces its specific effect on the system in a small degree, when externally applied; yet we doubt whether the effects of this plaster will sanction the adoption of it by the London College.

EMPLASTRUM PICIS. L. E. Pitch Plaster. (*Picis Abietinæ* ℔ij., *Abietis Resinæ* ℔j., *Resinæ. Ceræ, sing.* ℥ iv., *Myristicæ Olei expressi* ℥ j., *Olivæ Olei*, *Aquæ*, *sing.* f℥ ij. To the pitch, resin, and wax, melted together, add the other matters, and boil to a proper consistence.)

Oper. Stimulant, rubefacient.

Use. In catarrh, and other pulmonary affections, applied to the chest; and to the temples in pains of the head and chronic ophthalmia. When any serous exudation takes place, the plaster should be frequently renewed.

EMPLASTRUM PLUMBI (*Oxidi?*) U. S.—L. Emp. Lithargyri, E. D. Plaster of Lead, or Oxide of Lead. Lead Plaster. (*Plumbi Oxidi in pulv. sub. trit.* ℔vj., *Olivæ Olei*, *Congium*, *Aquæ* Oij. Boil together over a slow fire, stirring constantly until the oil and the oxide of lead form a plaster.)

Comp. Oxide of lead, and the oil changed so as to approximate to the nature of volatile oil. The water is evaporated.

Oper. Defensive, slightly adhesive.

Use. In excoriations; as a defence to slight wounds, and to retain their edges together; as a covering to corns; and to form the basis of some other plaster.

Off. Prep. *Emplast. Hydrargyri*, U. S.—E. *Emplast. Opii*, U. S.—L. *Emplast. Assafœtidæ.* U. S.—E. *Emplast. Gummosum*, E. *Emplast. Galbani*, U. S.—L. D. *Emp. Ferri*, U. S.—E. *Emp. Resinæ*, U. S.—L. E. D. *Emp. Saponis*, U. S.—L. E D. *Emp. Thuris*, D.

EMPLASTRUM RESINÆ. U. S.—L. Emplast. Resinosum, E. Emplast. Lithargyri cum Resina, D. Resin Plaster. Adhesive Plaster. (*Resinæ Flavæ* ℔ss., *Emplastri Plumbi* ℔iij. Melt the plaster with a gentle heat, then add the resin, and mix.)

Oper. Defensive, adhesive, slightly stimulant.

Use. In retaining the lips of recent wounds together, that they may heal by the first intention; and to give support to ulcerated parts, to assist their granulation, without rest. The plaster originally prepared by Mr. Baynton contained less resin; ʒ vj. only to ℔j. of the litharge plaster. This preparation, however, answers the purpose equally well, except in very irritable habits.

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[*] Opii ℥ ij.—*U. S. Phar*

EMPLASTRUM SAPŌNIS. U. S.—L. E. D. Soap Plaster (*Saponis concisi* ℔ss., *Emplast. Plumbi* ℔iij. Mix the soap with the melted plaster; and boil to a proper consistence.)

Oper Mildly discutient.

Use. Applied to lymphatic tumors; and used with the same views as the mercurial plaster, but with much less effect.

EMPLASTRUM SAPŌNIS COMPOSITUM *vel* **ADHÆRENS.** D. Compound Soap Plaster. (*Emplastri Saponis* ℥ ij., *Emplastri Lithargyri cum Resina,* ℥ iij.)

Use. To support the parts in the cure of ulcers.

EMPLASTRUM THŪRIS. D. Frankincense Plaster. (*Emplast. Lithargyri* ℔ij., *Thuris* ℔ss., *Oxydi Ferri Rubri* ℥ iij.)

Oper and *Use.* The same as the plaster of red oxide of iron.

***EMULSĬO ACACIÆ ARABICÆ.** E. Emulsio Arabica, D. Gum Arabic Emulsion. (*Nucleor. Amygd. Com.* ℥ j., *Aquæ* ℔ijss., *Mucilaginis Mim. Nilot.* ℥ ij., *Sacch.* ʒ iv. While beating the decorticated almonds with the sugar and water, add the mucilage.)

Prop. Inodorous; taste sweet, soft, mucilaginous; like milk.

Oper. Diluent, demulcent.

Use. In febrile and inflammatory complaints, particularly those of the kidneys and urethra; as calculus, gonorrhœa, and strangury from the absorption of the acrid matter of Spanish flies, or any other causes. A vehicle for other medicines.

Dose. Oss. or more, ad libitum.

Incomp. Acids, oxymel, and syrup of squills, spirits, tinctures, tartrate and bitartrate of potassa, bichloride of mercury, and spirit of nitric æther.

EMULSĬO CAMPHORÆ. E. Camphor Emulsion. (*Camphoræ* ℈j., *Nuc. Amygd. Com. Decort., Sacch. pur., sing.* ʒ iv., *Aquæ* ℥ vj.) *Emulsio Camphorata.*

Comp. Camphor mechanically suspended in emulsion; it separates in the course of a few days, and swims upon the surface of the mixture.

Oper. The same as camphor; and, consequently, this is only a convenient form of giving the remedy, as it proves always less nauseous when given in the liquid form.

Dose. f℥ ss. to f℥ j., several times a day.

ENĔMA ALOES. L. Clyster of Aloes. (*Aloes* ℈ij., *Potassæ Carbonatis* gr. xv., *Decocti Hordei* Oss. Mix and rub together.)

Use. As a stimulant, by contiguity to the uterus, in amenorrhœa; and for dislodging ascarides.

ENĔMA CATHĂRTĬCUM. E. D. Purging Clyster. (*Olive Oil* ℥ j., *Sulph. of Magnesia* ℥ ss., *Sugar* ℥ j., *Sennæ* ℥ ss., *Boiling Water* f℥ xvj. Infuse the senna for an hour, dissolve the sugar and salts, and mix the oil by agitation, E. *Manna*

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* Emulsions and Enemata, being extemporaneous preparations, are not noticed in the U. S. Phar.

℥j., *Decocti Chamæmeli Comp.* f℥x., *Ol. Olivæ* ℥j., *Sulph. Magnesiæ* ℥ss., D.)

Use. This is a good, gently stimulating, and emollient clyster; but it does not possess any peculiar advantage over those which are every day ordered in extemporaneous prescriptions.

ENĔMA COLOCYNTHĬDIS. L. Clyster of Colocynth. (*Ext. Colocynthidis Comp.* ℈ij., *Saponis mollis* ℥j., *Aquæ* Oj.)

Use. A stimulant purgative in constipation and colic.

ENĔMA FŒTĬDUM. E. D. Fœtid Clyster. *The former with the addition of* ʒij. *of the Tincture of Assafœtida.*

Oper. Antispasmodic, anodyne.

Use. In hysteria; spasmodic colic; the convulsions of infants; and for allaying the irritation produced by ascarides in the rectum.

ENĔMA OPĬI. L. E. D. Clyster of Opium. (*Tincturæ Opii* ♏xxx., *Decocti Amyli* f℥iv.)

Use. In irritable bladder, diseases of the prostate gland, diarrhœa, dysentery, and strangury from blisters.

ENĔMA TABACI. L. E Enema of Tobacco. (*Tabaci* ʒj., *Aquæ ferventis* Oj. Macerate for an hour, and strain.)

Oper. Sedative.

Use. In strangulated hernia, and spasmodic affections.

ENĔMA TEREBINTHINÆ. L. E. D. Turpentine Clyster. (*Terebinthinæ Olei* f℥j., *Ovi unius vitellum.* Rub together, and add gradually f℥xix. of barley-water.)

Use. In affections of the urinary organs.

ERGOTA. U. S. Ergot, L. E. Spurred Rye. (Acinula *clavus*, L. ? Spermædia *clavus ?* Secale Cornutum, U. S.) Europe.

Prop. A curved, striated, deep violet colored body, whitish within; inodorous, mawkish; burns with a whitish flame. Supposed by some to be a parasitic fungus; by others, as the diseased grain of *rye.* Yields a deep-brown tincture with alcohol; also yields a bitter and sourish extractive, and crystals which have been supposed to contain morphia—a fixed oil, fungin, albumen, osmazome, wax, and a peculiar extractive substance in which its properties are supposed to reside.

Oper. Stimulant, acting chiefly on the muscular system of the uterus. Narcotic; a narcotico-acrid poison.

Use. In parturition when the pains languish, and the uterine action becomes torpid, provided the os uteri be fully dilated, and the membranes ruptured. In leucorrhœa and uterine hæmorrhage.

Dose. ℈j. to ʒss. in cases of parturition; gr. v. to gr. x. in leucorrhœa, three or four times a day. The most common way of giving Ergot is in *decoction*, ʒj. of it bruised to ℥vj. boiling water—boil ten minutes; strain and sweeten, and give one-third every half hour—in parturient cases. Or, of the *Tincture* made by digesting ℥ss. in ℥vj. Rectified Spirit four days. ʒj.—of the *oil*, from twenty to fifty drops.

ERIGERON. U. S. (Secondary.) (Erig. *Canadense, Heterophyllum, Philadelphicum.* Flea Bane. Indigenous. *Syngenes. Superflua.* N. O. *Corymbiferæ.* ⊙.)

Prop. Canad. sp. has an agreeable odor, bitterish, acrid, somewhat astringent taste. Contains bitter extractive, tannin, gallic acid, and volatile oil.

Oper. Diuretic, tonic, astringent.

Use. In dropsy and diarrhœa. The two latter species are recommended in gravel and nephritic diseases, as well as dropsy.

Dose. Of the powder, from ʒss. to ʒj. Of the infusion, prepared in the proportion of ℥j. of the leaves to Oj. boiling water from f℥ij. to f℥iv. Aqueous extract, from gr. v. to gr. x. every few hours.

ERYNGIUM. U. S. (Secondary.) E. (*Aquaticum.* Button Snake Root. *Pent. Digyn.* N. O. *Umbelliferæ.* Indigenous. The Root. ⊙.)

Prop. Root has a bitter, pungent, aromatic taste.

Oper. Diaphoretic, expectorant, emetic.

Use. As an expectorant in pulmonary and catarrhal affections, its effects resemble those of Seneka Snake Root.

ERYTHRONIUM. U. S. (Secondary.) (*Ery. Americanum Big.* The Plant. Dog's Tooth Violet. *Indigenous. Hexandria. Monogynia.* N. O. *Siliaceæ.* ⊙.)

Prop. An indigenous, well known, perennial, bulbous plant, with two smooth, lanceolate leaves, diversified by numerous irregular spots.

Oper. Emetic.

Dose. From gr. xx. to gr. xxx. of the powdered recent bulb, proves emetic; a smaller dose, expectorant.

EUPATOREUM. U. S. Eup. *Perfoliatum.* Thoroughwort. (*Syngenesia Æqualis.* N. O. *Comp. Corymbiferæ. Indigenous.* ⊙.)

Prop. The herb. Several species are used medicinally in the U. S. Odor faint; intensely bitter taste, with slight astringency; virtues reside chiefly in an extractive matter, soluble both in water and in alcohol.

Oper. Tonic, diaphoretic, emetic, aperient, according to dose.

Use. As a diaphoretic in catarrh and rheumatism; in intermittents and remittents, and inflammatory diseases; as a tonic in dyspepsia and general debility; given cold. The *purpureum* is employed as a *diuretic.*

Dose. As a tonic, from ℈j. to ʒj. of the powdered leaves, or f℥j. to f℥iv. infusion; as a diaphoretic, every two hours, the infusion should be given warm, while the patient is covered in bed; as emetic and cathartic, a strong decoction, in doses of Oss. or more.

EUPHORBIA. U. S. (Secondary.) E. *Corollata, Ipecacuanha.* (*Dodecandria. Trigynia.* N. O. *Euphorbiaceæ. Indigenous* Spurge. The Root. ⊙.)

Prop. The root, when full grown, is sometimes an inch thick, and two feet long: without unpleasant taste; virtues reside in the cortical part, which constitutes two-thirds of the whole: extracted by water and alcohol.

Oper. The root of the E. *Corollata* is a certain and speedy emetic and cathartic. In small doses, diaphoretic and expectorant. In large doses it is apt to produce hypercatharsis, and inflammation of the mucous membrane of the stomach and bowels. Inferior to ipecacuanha as to safety, and to antimony as to certainty. Externally vesicant.

Dose. Of the powder, from gr. x. to gr. xx.; as a cathartic, from gr. iij. to gr. x. Recent root bruised, and applied to the skin, produces vesication.

EUPHORBIUM. L. E. D. Euphorbium. (Euphorbia *Offici* *narium? (Canariensis?) Dodecand. Trigynia.* N. O. *Euphorbiaceæ.* Africa. ♃.)

Comp. 37.0 resin, 19.0 wax, 20.5 malate of lime, 2.0 malate of potassa, 5 0 water, and 13.5 woody matter and loss.

Prop. Inodorous; taste, when chewed, nauseous, burning; tears irregular, about the size of a large pea, dry, friable, externally yellow, but paler within. Spec. grav. 1.129, partially soluble in alcohol; less so in water.

Oper. Errhine.

Use. Diluted with starch, or mild powder, it is snuffed up the nostrils in amaurosis, lethargy, chronic ophthalmia, and all cases where a copious discharge is required from the pituitary membrane.

EXTRACTUM ARTEMISIÆ ABSYNTHĬI. D. Extract of Wormwood. (A decoction defecated and evaporated.)

Prop. Inodorous; the flavor being dissipated with the essential oil; taste bitter.

Oper. Tonic.

Use. In the same cases for which bitters are generally employed.

Dose. Gr. x to ℈j. in pills twice or thrice a day.

EXTRACTUM ACONITI. U. S.—L. E Extract of Aconite. (*Aconiti fol. recent.* ℔j. Bruise in a stone mortar, sprinkling with water, press the juice out and evaporate to a proper consistence.)

EXTRACTUM ACONITI ALCOHOLICUM. U. S. (℞ *Of Aconite in coarse powder* ℔j., *Diluted Alcohol* Oiv. Moisten the aconite with Oss. of the diluted alcohol, and having allowed it to stand for twenty-four hours, transfer it to an apparatus for displacement, and gradually add the remainder of the alcohol When the last portion of this shall have penetrated the aconite, pour in sufficient water, from time to time, to keep the powder covered. Cease to filter when the liquid which passes begins to produce a precipitate, as it falls, in that which has already passed. Distil off the alcohol from the filtered liquor, and evaporate the residue to the proper consistence.)—*U. S. Phar.*

N. B.—The alcoholic extracts of *Belladonna, Conium, Hellebore, Hyoscyamus,* and *Sarsaparilla,* are directed by the U. S. Phar. to be prepared in the same manner.

Prop. Odor disagreeable; taste acrid, slightly styptic; color obscure green, or brownish red. It loses its virtues when long kept.

Oper. Narcotic, diuretic.

Use. In obstinate chronic rheumatisms and headaches; agues, glandular swellings; convulsions; chronic uterine hæmorrhages; neuralgia, and spinal irritations.

Dose. Gr. ¼ night and morning, gradually increased to gr. v. in the form of pills.

EXTRACTUM ALŎES PURIFĬCATUM. D. Extract of Aloes (The gummy part extracted by boiling water, defecated, and inspissated.)

Prep. Almost inodorous; taste bitter, but less unpleasant than the aloes.

Oper. Cathartic, emmenagogue.

Use. In the same cases for which the aloes are used.

Dose. Gr. v. to gr. xv. in pills.

Off. Prep. Pulv. Aloes Compositus, L. *Pilulæ Aloes Comp.,* L.

Pilulæ Aloes cum Myrrha, U. S.—L. *Pilulæ Aloes*, U. S *Pilulæ Aloes et Assafœtidæ*. U. S.

EXTRACTUM ANTHEMIDIS. E. Extractum Chamæmeli, D. Extract of Chamomile. (The volatile oil is dissipated in this preparation.)

Prop. Almost inodorous; taste a pure grateful bitter; color dark brown.

Oper. Tonic, stomachic.

Use. In dyspepsia, chlorosis and general debility.

Dose. Gr. x. to gr. xx. in pills, twice or thrice a day.

EXTRACTUM BELLADONNÆ. U. S.—L. E. Extract of Belladonna. (An expressed juice inspissated.) L.

Prop. Inodorous; taste bitterish.

Oper. Narcotic; it is used in the same cases as the plant.

Dose. Gr. ¼ gradually increased to gr ij. in pills.

EXTRACTUM CINCHONÆ CORDIFOLIÆ. L. E. D. Extract of Yellow Cinchona Bark. (A decoction evaporated.)

Comp. Kinate of quina, a small portion of kinate of cinchonia, and of lime, extractive, mucilage, and tannic acid. (2.3 per cent. quina+0.08 cinchonia.—*Thiel.*)

Prop. Odor sweetish; taste bitter, but less austere than the bark; fracture rough, dull; color deep brown.

Oper. The same as the bark in substance; and consequently it is used in the same cases; but with much less certainty of effect, owing to some chemical change produced on the drug during the boiling.

Dose. Gr. x. to ʒ ss. dissolved in any distilled water. Formerly the dose of gr. x. was supposed to be equivalent to ʒ ss. of the bark powder; but Sir John Pringle's experiments first showed that this opinion was unfounded; and the chemical analysis of the bark proves that the reverse is nearer the truth.

It is kept both in a hard and a soft state.

EXTRACTUM CINCHŌNÆ LANCIFOLIÆ. L. Extract of pale Cinchona Bark.

Comp. Chiefly kinate of cinchonia, a small portion of kinate of quina and of lime, tannic acid, extractive, and mucilage. (Cinchonia 0.48 per cent.+0.06 quina.—*Geiger.*)

Oper. and *Use.* The same as the extract of cinchona cordifolia.

EXTRACTUM CINCHŌNÆ OBLONGIFOLIÆ. L. D. Extract of red Cinchona Bark.

Comp. More kinate of quina and less of cinchonia than the extract of pale cinchona bark. (Quina 1.7 per cent.+0.08 cinchonia.)

Oper. and *Use.* The same as the other extracts of cinchona.

EXTRACTUM CINCHŌNÆ. U. S.—E. Resinous Extract of Bark. (An aqua-spirituous Extract, containing both the extractive and resin of the barks. Take of *Peruvian Bark*, in *coarse powder*, ℔j., *Alcohol* Oiv., *Water*, a *sufficient quantity*; macerate the Peruvian Bark with the alcohol for four days; then filter by means of an apparatus for displacement, and when the liquid ceases to pass, pour gradually upon the bark sufficient water to keep its surface covered. When the filtered tincture measures Oiv., set it aside, and proceed with the filtration until Ovj. of infusion are obtained. Distil off the alcohol from the tincture, and evaporate the infusion till the liquids respectively are brought to the consistence of thin honey; then mix them, and evaporate so as to form an extract.)

N. B.—In the same manner the U. S. Phar. directs to prepare *Extract of Jalap* and *Extract of Podophyllum*.

Prop. Taste bitter, with the austereness of the bark; fracture resinous.

Oper. The same as the bark in substance.

Use. In ague, and every complaint for which bark is used. This is altogether a preferable preparation to the watery extract; the rectified spirit contains water enough to enable it to take up all the active principles of the drug; less heat is required to evaporate the menstruum. The expense of the spirit is the greatest objection to it. It is more grateful to the stomach than the watery extracts.

Dose. Gr. x. to gr. xx. in pills, or dissolved in some distilled water.

EXTRACTUM COLCHICI CORMI. L. Extract of the Bulb of Colchicum.

Comp. Gallate of colchicia, fecula, mucilage.

Oper. Purgative, narcotic.

Use. In gout and acute rheumatism.

Dose. Gr. j. to gr. ij. repeated every four or six hours.

EXTRACTUM COLCHICI ACETICUM. L. E. Acetic Extract of Colchicum. (*Colchici Cormi recentis* ℔j., *Acidi Acetici* f℥iij. Bruise the bulbs, gradually sprinkling them with the acid, then express the juice, and evaporate in a vessel not glazed with lead to a proper consistence.)

Comp. Acetate of colchicia, fecula, mucilage.

Oper. Diuretic, narcotic.

Use. In gout, acute rheumatism, and diseases of excitement.

Dose. Gr. j. to gr. ij. twice or thrice a day.

Incomp. Alkalies and their carbonates, magnesia, lime water.

EXTRACTUM COLŎCYNTHĬDIS. L. E. D. Extract of Colocynth. (*Colocynthidis concisa* ℔j., *Aquæ distillatæ* cong. ij Boil for six hours, maintaining the measure with distilled water. Strain the liquor while hot, and evaporate to a proper consistence.)

Comp. Colocynthin 14.4+extractive 10.0+fixed oil 4.2+resin 12.2 +gummy matter 27.1+pectic acid 7.9+5.7. Phosphates of lime and magnesia.

Oper. Cathartic, mild in its operation, and not apt to occasion gripings.

Use. For evacuating the bowels; and as an adjunct to other purgatives.

Dose. Gr. v. to ʒss. in pills at bed-time.

EXTRACTUM COLŎCYNTHĬDIS COMPOSĬTUM. U. S.—L. D. Compound Extract of Colocynth. (*Colocynth. Pulpæ con.* ℥vj., *Aloes Ext. contriti* ℥xij., *Scammon. cont.* ℥iv., *Cardamomi contrit.* ℥j., *Saponis* ℥iij., *Spiritus tenuioris*, cong. j Macerate the pulp in the spirit at a gentle heat for four days, strain, add the aloes and scammony and soap; then evaporate to a proper consistence, and towards the end add the cardamoms.)

Oper. Cathartic, stimulant.

Use. In obstinate visceral obstructions; habitual costiveness in leucophlegmatic habits; dropsies; worms.

Dose. Gr. vj. to ʒss. in pills.

EXTRACTUM CONII. U. S.—L. E. Succus Spissatus Conii, D. Extract of Hemlock. (An expressed juice, inspissated without defecation.)

Comp. Conia, extractive, mucilage, volatile oil, clorophylle.

Prop. Odor fetid; taste bitterish and saline; color dark olive; it loses its virtues when kept, and a saline efflorescence appears on its surface.

Oper. Narcotic, alterative, resolvent.

Use. In scrofula, scirrhus, and cancer, particularly for allaying the pain of uterine cancer, without producing costiveness, as opium does; a useful addition to mercurial salts in cutaneous complaints.

Dose. Gr. iij. gradually increased to ℈ij. twice or thrice a day.[*]

Test. Triturate with liquor potassæ; if good, a strong odor of conia is evolved.

EXTRACTUM DIGITALIS. L. E. Extract of Foxglove (Inspissated juice of the leaves.)

Comp. Digitalia? resin, fatty matter, clorophylle, salts of potassa, and lime.

Oper. Stimulant, narcotic, diuretic.

Use. In dropsies, after the tension is diminished by blood-letting and other means; it is inferior to the tinctures.

Dose. Gr. ss. to gr. j.

Incomp. Diacetate of lead, infusions and decoctions of astringent vegetable products; carbonates of alkalies.

EXTRACTUM ELATERII. L. E. D. Extract of Elaterium. (The fecula of the expressed juice.)

Comp. Elateria 44+green resin 17+fecula 6+saline inert matter 6+lignin 27=100 parts.

Oper. Violently cathartic, hydragogue, sometimes emetic.

Use. In ascites, when other remedies have failed; and in very obstinate costiveness.

Dose. Gr. 1-6th made into a pill, with extract of gentian, or with calomel gr. j., every hour or two, till it operate; and this is repeated every sixth or eighth hour till a cure be effected.[†]

EXTRACTUM GENTIANÆ. U. S.—L. E. Ext. Gentianæ Luteæ, D. Extract of Gentian. (The evaporated decoction.) (Take of *Gentian, in coarse powder*, ℔j., *Water, a sufficient quantity;* mix the gentian with a pint of the water, and after allowing the mixture to stand for twenty-four hours, introduce it into an apparatus for displacement, and pour water upon it gradually until the liquid passes but slightly impregnated with the properties of the gentian. Heat the filtered liquid to the boiling point, strain, and evaporate to the proper consistence.—*U. S. Phar.*) In the same manner the U. S. Phar. directs us to prepare the Watery Extracts of *Dulcamara*, *Butternut*, *Rhatany*, and *Quassia*.

Comp. Gentianin? mucilage, sugar.

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[*] Impotentiam virilem (*says Bergius*), sub usu Conii curatam observavi, in viro quodam plusquam quadragenario, qui omnem erectionem penis perdiderat, postinde tamen plures liberos procreavit.—*Mat. Med.*, vol. i., p. 195

[†] This substance is improperly termed an extract.

Prop. Inodorous, intensely bitter, black, shining, tenacious.
Oper. Tonic, stomachic; in large doses aperient.
Use. In dyspepsia, jaundice, &c.; but it is chiefly used as a medium for giving the metallic oxides in the form of pills: an excellent adjunct to ipecacuanha in the latter stage of dysentery.
Dose. Gr. x. to ʒss. twice or thrice a day.
Off. Prep. *Pilulæ Aloes Comp.*, L.
EXTRACTUM GLYCYRRHIZÆ. U. S.—L. E. D. Extract of Liquorice. (The evaporated decoction.)
Prop. Almost inodorous; taste sweet, mucilaginous; brittle.
Oper. Demulcent.
Use. In the tickling cough of catarrh it is perhaps the most useful of the demulcents, as it hangs about and sheathes the fauces.
Dose. ʒj. to ʒij. ad libitum.
Off. Prep. *Pilulæ Opiatæ*, E. *Pilulæ Scilliticæ*, E. *Trochisci Glycyrrhizæ Glabræ*, E. *Trochisci Glycyrrhizæ cum Opio*, E.
EXTRACTUM HÆMATOXYLI. U. S.—L. E. Ext. Hæmatoxyli Campechiani, D. Extract of Logwood. (The evaporated decoction.) (Take of *Logwood, rasped*, ℔j., *Water, one gallon;* boil down to Oiv. and strain the liquor while hot; then evaporate to the proper consistence.)
N. B.—In the same way the U. S. Phar. directs to prepare the *Extract of Dandelion.*
Prop. Almost inodorous; taste sweet, austere; color a deep reddish purple; soon hardens and becomes brittle.
Oper. Astringent.
Use. In diarrhœas, the protracted stage of dysentery, and internal hæmorrhages. It may be given clysterwise in solution.
Dose. Gr. x. to ʒj. in pills, or dissolved in cinnamon water.
Incomp. Alkalies and their carbonates; magnesia, carbonate of lime.
EXTRACTUM HYOSCYAMI. U. S.—L. E. Succ. Spiss. Hyoscyami, D. Extract of Henbane. (The expressed juice inspissated without defecation.)
Comp. Hyoscyamia? albumen, gum, fecula, salts.
Prop. Odor slightly fetid; taste nauseous, bitterish, sub-saline.
Oper. Narcotic.
Use. In nervous affections, rheumatism, gout, chordees, obstinate ulcerations; and whenever it is required to allay pain, and avoid the costiveness which opium is apt to induce.
Dose. Gr. ij. to ℈ss. It has been increased to the extent of ℈j. twice a day.
Incomp. Astringent infusions and decoctions.
EXTRACTUM JALAPÆ. U. S.*—L. Ext. Resinæ Jalapæ, E. Ext. Jalapæ, D. Extract of Jalap. (A spirituous tincture distilled, and an aqueous decoction evaporated, and the remains mixed together, kept both soft and hard.)
Oper. Cathartic, hydragogue.
Use. In costiveness, worms, dropsy, generally combined with soap or calomel.

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* See Ext. Cinchonæ.

Dose. Gr. x. to ℈j. in pills. To children the hard extract is given, triturated with sugar or testaceous powders.

Off. Prep. *Pulv. Scammonii Comp.*, L.

EXTRACTUM JUGLANDIS. U. S. Extract of Butternut. This is prepared in the same manner as the Extract of Gentian, from the sliced inner bark of the root of the *Juglans Cinerea*, gathered in May or June.

Prop. Of a black color; sweetish odor; and bitter, astringent taste.

Oper. Purgative, or laxative, according to dose.

Dose. From gr. xx. to gr. xxx. it acts as a mild cathartic.

EXTRACTUM KRAMERIÆ. U. S.—E. Extract of Krameria. Extract of Rhatany. (Prepared in the same way with that of Gentian.)

Comp. Tannic acid, extractive.

Prop. A powerful astringent.

Use. In chronic diarrhœa and internal hæmorrhages.

Dose. From gr. iv. to ℈j.

EXTRACTUM LACTUCÆ. L. Extract of Lettuce. (℞ The leaves of fresh lettuce ℔j.; beat them in a stone mortar, sprinkling them with water; then express the juice, and evaporate it without allowing it to subside, until it acquire a proper degree of consistence.)

Prop. Odor narcotic, like opium; taste bitter.

Oper. Narcotic, diaphoretic.

Use. In the same cases as opium; irritable gastric dyspepsia.

Dose. From gr. iij. to gr. x. in form of pills.

EXTRACTUM LUPULI. L. E. Extractum Humuli, D. Extract of Hops. (The evaporated decoction.)

Prop. Inodorous; taste bitter, with the peculiar flavor of the hop.

Oper. Tonic, anodyne? diuretic.

Use. In gout; dyspepsia; and mania, to procure rest; but its virtues are very doubtful.

Dose. Gr. v. to ℈j. in pills.

EXTRACTUM NUCIS VOMICÆ. U. S.—D. E. Extract of Nux Vomica. (*Nucis Vomicæ rasæ* ℥viij., *Spiritus tenuioris mensura* ℔ij. Digest in a covered vessel for three days, strain the liquor, and express what remains in a press; to this residue add ℔jss. of proof spirit, digest for three days, and express the residue. Consume the mixed liquors by distillation, and reduce to a proper consistence.)

Oper. Stimulant.

Use. In paraplegia, and other cases of partial paralysis.

Dose. From gr. ¼ to gr. jss.

EXTRACTUM OPII PURIFICATUM. L. Extractum Opii, E. Ext. Opii Aquosum, D. Extract of Opium. (*Opii concisi* ℥xx, *Aquæ distillatæ* cong. j.)

Comp. Bimeconate of morphia, codeia, narcotina, narceia sulphate of lime, gum, resin.

Prop. Inodorous; taste bitter; color black; dissolved in water; it is not precipitated by alcohol.

Oper. Narcotic, anodyne, sedative, antispasmodic, with less subsequent derangement of the nervous system than crude opium occasions.

Use. In all cases in which opium is useful; and better fitted for children and very irritable habits.

Dose. Gr. ss. to gr. v. in pills.

Incomp. Solutions of astringent vegetables, carbonate of potassa, bichloride of mercury, sulphate of copper, sulphate of zinc, acetates of lead, nitrate of silver, all of which precipitate this extract from its solution altered in its nature.

Off. Prep. *Syrupus Opii*, D.

EXTRACTUM PAPAVĔRIS. L. E. Extract of White Poppy. (The decoction evaporated.) *Extractum Papaveris Albi.*

Comp. Nearly the same as the extract of opium, with a smaller proportion of the alkaloids.

Oper. Narcotic, anodyne; without producing so generally delirium, headache, or nausea, as opium and its extract produce.

Use. As this extract possesses nearly the same virtues as opium only in a weaker degree, so it is employed in the same instances It is to be preferred when the head is much affected.

Dose. Gr. ij. to ℈ss. in form of pills.

Incomp. As under Extractum Opii.

EXTRACTUM PAREIRÆ. L. E. Extract of Pareira.

Use. In affections of the urinary organs.

Dose. From gr. x. to ʒ ss.

EXTRACTUM PODOPHYLLI. U. S. Extract of May Apple (This is prepared from the powdered root of the *Podophyllum Peltatum*, in the manner described for *Ext. Cinchonæ.*)

Prep. Possesses the purgative properties of the root, and same sensible qualities.

Oper. Purgative.

Dose. From gr. v. to gr. xv.

EXTRACTUM QUASSIÆ. U. S.—E. Extract of Quassia. (Prepared in the same way with Extract of Gentian.)

Comp. Quassina, mucilage.

Prop Tonic.

Use. In atonic dyspepsia, and general debility.

Dose. From gr. v. to gr. x.

EXTRACTUM QUERCUS CORTĬCIS. D. Extract of Oak Bark. (The decoction evaporated.)

Oper. Astringent, tonic.

Use. In alvine hæmorrhages and immoderate fluxes.

EXTRACTUM RHĒI. L. E. D. Extract of Rhubarb. (*Rhei contriti* ℥ xv., *Spiritus tenuioris* Oj., *Aquæ distillatæ* Ovij. Macerate for four days with a gentle heat, and allow the dregs to subside; evaporate the liquor to a proper consistence.)

Oper Purgative and stomachic; but as the extractive matter attracts oxygen in the humid state, and particularly when heated, much of the virtue of the medicine is destroyed in this preparation.

Use. In the same cases for which the powdered root is employed; but chiefly "as a basis for pills to which more active matters are to be added."

Dose. Gr. x. to ʒ ss. in pills, or dissolved in peppermint water.

EXTRACTUM RŪTÆ. D. Extract of Rue. (A decoction evaporated.) *Extractum Rutæ.*

Prop. Inodorous; taste bitter, acrid.

Oper Tonic, stomachic, emmenagogue?

Use. The active principle on which the stimulant and anti [illegible] operation of rue depends, is its essential oil, which is dissipated in this preparation. As a bitter it is inferior to th extract of chamomile flowers.

Dose. Gr. x. to ʒss. in pills.

EXTRACTUM SARZÆ. U. S.—L. Extract of Sarsaparilla. (A strained decoction evaporated.)

Oper. The same as the powder of the root, to the decoction of which this extract is added, "to render it stronger and more efficacious."

Dose. Gr. x. to ʒj in pills, or dissolved in the decoction.

EXTRACTUM SARSAPARILLÆ FLUIDUM. E. D. Fluid Extract of Sarsaparilla. (*Radicis Sarsaparillæ Incisæ* ℔j., *Aquæ ferv.* Ovj. Digest the root for two hours in four pints of the water; take it out, bruise it, and replace it in the water, and boil for two hours; filter, and squeeze out the liquid; boil the residue in the remaining water, and filter and squeeze out this liquor also; evaporate the united liquors to the consistence of thin syrup, and add when cool as much rectified spirit as will make in all f℥ xvj. Filter.) Wood and Bache doubt the efficacy of this preparation, and recommend in place of it the following formula of W. Hodgson, jr., of Philadel.: ("Take of *Sarsap.* ℥ xvj., *Liquorice Root* bruised, *Guaiac. Wood* rasped, *Bark of Sassafras Root*, each ℥ ij., *Mezereon* ʒ vj., *Diluted Alcohol* Oviij. Digest for fourteen days at a common temperature, then strain, express, and filter. Evaporate the tincture in a water bath to f℥ xii.; then add ℥ viij. of white sugar, and remove from the fire as soon as the sugar is dissolved.") The advantages of this process are, that by means of the alcohol all the virtues of the root are extracted, while the low temperature required in its preparation is not sufficient to impair these virtues.

Use. In the same cases as the powder of the root, especially in secondary syphilis.

Dose. From f℥ ij. to f℥ iv. twice or thrice a day; of Hodgson's Extract, ʒ j. three or four times a day.

EXTRACTUM SIVE RESINA SCAMMONII. E. Resin of Scammony. (Boil powder of scammony in successive portions of proof spirit; distil off the spirit; then pour away the watery solution from the resin; agitate this with boiling water until it is well washed; lastly, dry at a temperature not exceeding 240°.)

Use. The same as scammony. It gripes violently.

EXTRACTUM SPARTII SCOPARII. D. Extract of Broom Tops. (*The Spartium Scoparium.*)

Oper. Diuretic, stomachic.

Use. In dropsies, but seldom employed.

Dose. ʒ ss. to ʒ j. in pills.

EXTRACTUM STRAMONII. U. S.—L. E. D. Extract of Stramonium. (℞ *Seminorum Stramonii* ℥ xv., *Aquæ ferventis* Cong. j. Macerate the seeds for four hours in a vessel slightly covered near the fire; then take them out, and bruise them in a stone mortar, and return them again to the fluid when they are bruised. Then boil the liquor down to four pints, and strain it while it is hot. Finally, evaporate it to a proper thickness. The U. S. Phar. directs to take of *Stramonium Seed* ground into powder ℔j., *Diluted Alcohol* a sufficient quantity. Having rubbed the powder with Oss. of diluted alcohol, introduce the mixture into an apparatus for displacement and pour upon it gradually diluted alcohol till the liquid passes colorless. Distil off the alcohol from the filtered liquor, and evaporate the residue to the proper consistence.) Of this extract the dose is gr ss. twice a day, to be gradually increased.

Prop. Odor narcotic; taste bitter.

Oper. A powerful narcotic. When taken in quantity sufficient to affect the system moderately, it produces more or less cerebral disturbance, such as vertigo, headache, dimness of vision, &c., with a disposition to sleep; has a laxative effect upon the bowels, and increases the secretion from the skin and kidneys; does not affect the pulse, but sometimes produces deranged sensations about the fauces, œsophagus, and trachea.

Use. In asthma, pertussis, neuralgia, syphilis, cancer, rheumatism, and other spasmodic affections.

Dose. From gr. iv. to gr. x. in the form of pill, twice or thrice a day.

EXTRACTUM STYRACIS. E. Extract of Styrax. (Exhaust styrax by boiling it with successive quantities of rectified spirit; filter the spirituous solutions; distil off the greater part of the spirit; and evaporate the remainder to a thin extract.)

Use. See Styrax.

EXTRACTUM TARAXACI. U. S.—L. E. Ext. Taraxaci, D. Extract of Dandelion.* (A strained decoction evaporated.)

Prop. Inodorous; taste bitter, mucilaginous.

Oper. Deobstruent, laxative, diuretic.

Use. In jaundice, chronic inflammation, and incipient scirrhus of the liver, chronic derangements of the stomach, hypochondriasis, and dropsy.

Dose. Gr. iv. to ʒj. united with sulphate of potassa.

EXTRACTUM UVÆ URSI. L. Extract of Whortleberry.

Oper. and *Use.* See Decoction.

FARINA. L. E. Triticum Hybernum; Farina, D. Flour. (Vide Amylum.)

Comp. Gluten, starch, albumen, gum, phosphate of lime, carbon, hydrogen, oxygen, nitrogen.

Use. The introduction of Flour into the Pharmacopœias seems to be unnecessary, as it is scarcely ever used in the state of flour, except to parts affected with erysipelatous inflammations; bread is used in making cataplasms; and sometimes in forming pills.

FERRUM. U. S.—L. D. Ferri filum, E. Ferri limatura, E. Iron.

Prop. Color bluish grey; texture fibrous; fracture brilliant and fine grained; spec. grav. 7.6 to 7.8, hard, ductile, malleable, magnetic, equivalent 28.

Oper. Tonic, deobstruent; anthelmintic; producing fetid eructations, owing to its meeting with acid in the stomach, which oxidizes it, and evolves sulphuretted hydrogen gas.

Use. In general debility, dyspepsia, hysteria, chlorosis, worms, and in passive hæmorrhages. It can prove useful only when it is oxidized, which is known by the eructations and black fæces.

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* See Ext. Hæmatoxyli

Dose. Of the filings, gr v to ℈j. with some aromatic powder; or in the form of electuary with honey; or pills with extract of gentian.

Off. Prep. *Ferri Ammonio-chloridum*, L. *Ferri Limatura Purificata*, E. *Ferri Ferrocyanuretum*, U. S. *Ferri Acetas*. D. *Ferri Carbonas*, E. D. *Ferri Carb. saccharatum*, E. *Ferri Iodidum*, U. S.—L. E. *Ferri Sulphas*, L. E. D. *Ferri Potassio-tartras*, U. S.—L. *Tinct. Acetatis Ferri*, D. *Vinum Ferri*, L. D. *Ferri Iodidi solutio*, U. S.—E. *Ferri Sesquioxidum*, L. E. D.

FERRI ACETAS. D. Acetate of Iron. (*Ferri Carbonatis partem unam*, *Acidi Acetici partes sex.* Digest for three days, and strain.) *To be kept in stoppered bottles.*

Prop. Small green prismatic crystals; taste styptic; spec. grav. 1.368. Converted into peracetate by exposure to the air, or to a high temperature.

Oper. Tonic, astringent.

Use. In dyspepsia, chlorosis, hysteria, and rachitis.

Dose. Gr. iv. to gr. xij.

FERRI AMMONIO-CHLORIDUM. L. Ferrum Ammoniatum, U. S. Murias Ammoniæ et Ferri, E. D. Ammoniated Iron. (*Ferri Sesquioxidi*, ℥ iij., *Acidi Hydrochlorici* Oss., *Ammoniæ Hydrochloratis* ℔ijss., *Aq. dist.* Oiij., *Ferrum Ammoniatum.*)

Comp. Hydrochlorate of ammonia, sesquichloride of iron.

Prop. Odor resembling saffron; taste styptic; deliquescent, soluble in alcohol and water.

Oper. Tonic, emmenagogue, aperient, attenuant.

Use. In epilepsy, hysteria, chlorosis, scrofula, rickets, and mesenteric obstructions; sometimes in cancer.

Dose. Gr. iij. to gr. xv. twice or thrice a day, in pills, with extract of gentian.

Off. Prep. *Tinctura Ferri Ammonio-chloridi*, L.

FERRI CARBONAS SACCHARATUM. E. Sugared Carbonate of Iron. (*Sulph. of Iron* ℥ iv., *Carb. of Soda* ℥ v., *Pure Sugar* ℥ ij., *Water* Oiv. Triturate the washed precipitate with the sugar; and dry the mixture at 120°.) An excellent chalybeate. Possesses the advantages of having nearly all the iron in it in the state of protoxide, and of being readily soluble in acids. More active than the subcarbonate of iron.

Use. The same as the sesquioxide of iron.

Dose. Gr. v. to gr. xxx. in the form of pill.

FERRI CITRAS. (*Citrate of Iron.*) The citrate of the *sesquioxide* is prepared by boiling in a matrass, till the whole of the oxide is dissolved, *Citric Acid* ℥ iij., *Hydrated Oxide of Iron* (dry) ℥ ij. *Distilled Water* ℥ xij. Filter and wash with distilled water sufficient to obtain ℥ xij. of liquid. This is the *Liquid Citrate of Iron* of the French Pharmacopœia.

Uses and *Dose.* Same as the tartrate and lactate of iron.

FERRI FERROCYANURETUM. U. S. Ferri Percyanidum, L. (*Ferrocyanuret of Iron. Pure Prussian Blue.*) (℞ *Sulphate of Iron* ℥ iv., *Sulph. Acid* ʒ iijss., *Nitric Acid* ʒ vj., *Ferrocyanuret of Potassium* ℥ ivss., *Water* Oij. Dissolve the sulphate of iron in a pint of water, and having added the sulphuric acid, boil the solution. Pour into it the nitric acid in small portions, boiling the liquid for a minute or two after each addition, until it no longer produces a dark color; then allow the liquid to cool. Dissolve the ferrocyanuret of potassium in the remainder of the water, and add this solution gradually to the first liquid, agitating the mixture after each addition; then pour it upon a filter. Wash the precipitate with boiling water until the washings pass tasteless. Lastly, dry it, and rub it into powder.)—*U. S. Phar.*

Use. For the preparation of the bicyanide of mercury and hydrocyanic acid; in intermittent and remittent fevers, epilepsy, and neuralgia.

Dose. Gr. iv. to gr. vj. three times a day.

FERRI FILUM. U.S. Iron Wire.

FERRI IODIDUM. U.S.—L.E. Iodide of Iron. (*Iodinii* ℥ij., *Ferri Ramentorum* ℥j., *Aquæ distillatæ* Ojss. Mix the iodine with Oj. of the water in a glass vessel, and add the iron filings gradually, stirring constantly. Heat in a sand bath, and pour off the fluid when it has acquired a greenish color; wash what remains with the Oss. of boiling water. Evaporate the mixed fluids, filtered at 212°, in an iron vessel, till the salt is dry. Preserve the preparation in a well-closed vessel, excluded from the light.)

Prop. In aggregates of needle-formed crystals, of an iron-grey color, very deliquescent; taste acrid, metallic; soluble in water; decomposed by heat. When exposed to the air it is decomposed, and sesquioxide of iron is deposited.

Comp. 1 equ. iodine=126.3+1 iron=28+5 water=45, equiv 199.3.

Oper. Tonic, emmenagogue, deobstruent.

Use. In all cases of debility, in scrofula, incipient cancer, amenorrhœa, secondary syphilis, mesenteric obstructions. A bad form of the preparation, which should only be kept in solution

Dose. Gr. iij. to gr. viij. in solution.

FERRI IODIDI SOLUTIO. (Liquor.) U.S.—E. Solution of Iodide of Iron. (*Iodine* gr. 190+*Clean Iron Wire* gr. 100, *Distilled Water* f℥vj. Preserve the solution with iron wire in the bottle. The U.S. Phar. directs to take of *Iodine* ℥ij., *Iron Filings* ℥j., *Prepared Honey* f℥v., *Distilled Water* a sufficient quantity. Mix the iodine with f℥x. of the distilled water, in a glass vessel, and gradually add the iron filings. Heat the mixture gently until the liquor acquires a light-greenish color; then having added the honey, continue the heat a short time and filter. Lastly, pour distilled water upon the filter, and allow it to pass until the whole of the filtered liquor measures f℥xx. Keep in closely stopped bottles.)

Use. The same as the iodide.

Dose. ♏xl. to fʒj.

FERRI LACTAS. (*Lactate of Iron. Lactate of Protoxide of Iron.*) Prepared by digesting at a low temperature *lactic* acid, diluted with water, upon iron filings. At the end of six or seven hours, the liquor is boiled, filtered, and concentrated, when, on cooling, it deposits crystals. These crystals, drained in a flannel, and washed with *alcohol* by displacement, should be dried rapidly, and be preserved from any contact with the air.

Prop. White, crystalline plates; sparingly soluble in water; reddens litmus paper; and possesses a ferruginous taste.

Use. As a tonic in *chlorosis* and *anæmia*, in lozenges, to the extent of ℈j. in twenty-four hours; or in syrup, made by mixing

Ferri Lactat. ʒj., *Aquæ Distillat. bullient.* ℥ vjss., *Sacch. Alb.* ℥ xiij. Or in pills: *Chalybeate bread* has been used in the Parisian hospitals, with much success, in *chlorosis*. From four to five grains of Lac. Iron are mixed with every ℥ iijss. of bread

FERRI MURIATIS TINCTURA. E. See Tinctura Ferri Sesquichloridi.

FERRI OXIDUM HYDRATUM. U. S.

FERRI OXĬDUM NIGRUM. E. Black Oxide of Iron. (*Sulph. of Iron* ℥ vj., *Sulph. Acid* 0 ʒ ij. and f℈ ij., *Nitric Acid* f℥ ivss., *Aquæ Ammoniæ* f℥ ivss., *Boiling Water* Oiij.)

Use. The same as the sesquioxide of iron.

FERRI OXĬDUM NIGRUM. D. Black Oxide of Iron. (Let scales of the oxide of iron, collected round the anvils of smiths, be washed, dried, and purified from dross by the application of a magnet. Then reduce them to powder, the finer parts of which are to be separated in the manner prescribed for the preparation of chalk.)

Use. In the same case as the rust.

Dose. Gr. v. to ʒj.

FERRI OXĬDUM RUBRUM. D. See Oxidum Ferri Rubrum.

FERRI PHOSPHAS. U. S. (*Phosphate of Iron.*) (℞ Of *Sulphate of Iron* ℥ v., *Phosphate of Soda* ℥ vj., *Water* one gallon. Dissolve the sulphate of iron and phosphate of soda severally in four pints of the water; then mix the solutions, and set the mixture by, that the powder may subside; lastly, having poured off the supernatant liquor, wash the phosphate of iron with hot water, and dry it with a gentle heat.)—*U. S. Phar.*

Prop. Phosphate of iron is insoluble in water, but dissolved by dilute hydrochloric acid, forming a solution which yields with ammonia a precipitate soluble in an excess of the alkali.

Use. A valuable tonic in amenorrhœa, and some forms of dyspepsia; also in intermittents.

Dose. Gr. v. to gr. x.

FERRI POTĂSSIO-TARTRAS. L. FERRUM TARTARISATUM, E. Ferri et Potassæ Tartras, U. S. Tartarum Ferri, D. Potassio Tartrate of Iron. Tartrate of Iron and Potassa. (*Ferri Sesquioxidi* ℥ iij., *Acidi Hydrochlorici* Oss., *Liq. Potassæ* Oivss., *vel q. s.*, *Potassæ Bitart.* ℥ xjss., *Liq. Ammoniæ Sesquicarbonatis* Oj., *Aquæ Dist. Cong.* iij. Mix the sesquioxide with the acid, and digest on a sand bath for two hours. Add two gallons of the water, and set aside for an hour; then pour off the fluid, and add the Liq. Potassæ. Wash the precipitate well, and boil with the bitartrate mixed in a gallon of water. Neutralize the solution with the solution of sesquicarbonate of ammonia; strain, and evaporate to dryness.)

Comp. 1 equiv. of sesquitartrate of iron=135.72+1 tartrate of potassa=113.63, equiv.=249.35.

Prop. Inodorous; taste styptic; wholly soluble in water; solution not altered by liquor potassæ, nor by ferrocyanide of potassium.

Oper. Tonic, deobstruent.

Use. This is one of the mildest of the salts of iron; and so palatable, that children may be easily persuaded to take it. In scrofulous tumors, weakened bowels, &c.

Dose. Gr. x. to ʒss. in powder, or bolus, mixed with any aromatic, or with columba.

Incomp. Potassæ sulphuretum, infusions of oak bark, galls, or other astringent vegetables.

FERRI RAMENTA. (Iron Filings.) U. S.

FERRI RUBIGO. D. Ferri Oxidum Rubrum, E. Rust, or Carbonate of Iron. (A sesquioxide.)

Comp. Brown oxide of iron; carbonic acid?

Prop. Inodorous; taste styptic; reddish brown; pulverulent

Oper. Tonic, aperient.

Use. In debility, &c. Cullen was of opinion that the simple rust was equal to the other preparations of iron; and that the stomach bore it better.

Dose. Gr. v. to ʒss. united with pulvis cinnamomi compositus

FERRI SESQUIOXIDUM. L. Ferri Subcarbonas, U. S.—D. (Carbonas Ferri Præcipitatus, E Sesquioxide of Iron. Precipitated Carbonate of Iron, from Sulphate of Iron by Carbonate of Soda.) *Ferri Subcarbonas*, U. S. (Take of *Sulphate of Iron* ℥viij., *Carbonate of Soda* ℥ix., *Boiling Water* one gallon Dissolve the iron and soda severally in Oiv. of the water; then mix the solutions, and having stirred the mixture, set it by that the powder may subside. Lastly, having poured off the supernatant liquor, wash the subcarbonate of iron with hot water, wrap it in bibulous paper, and dry it with a gentle heat.)—*U. S. Phar.*

Comp. Sesquioxide of iron; carbonic acid?

Prop. Inodorous; taste styptic; color reddish brown, insoluble in water.

Oper. Tonic, emmenagogue, alterative.

Use. It is advantageously employed in tic douloureux and other forms of neuralgia, dyspepsia, chlorosis, chorea, and lately has been much recommended in cancer. One of our best chalybeates.

Dose. Gr. v. to ʒss. united with myrrh, bitter extracts, or some aromatic.

Incomp. Acids and acidulous salts.

Off. Prep. *Ferri Ammonio-chloridum*, L. *Ferri Potassio-tartras*, U. S.—L. *Tartarum Ferri*, D. *Tinct. Ferri Sesquichloridi*, L. *Tinct. Ferri Muriatis*, U. S.—D. *Ferrum Ammoniacum*, U. S.—L.

FERRI SULPHAS. U. S.—L. E. Sulphas Ferri, D. Sulphate of Iron. (A protoxide, or at the minimum of oxidation, and sulphuric acid.) *Ferrum Vitriolatum.*

Comp. 1 eq. oxide of iron=36+1, sulphuric acid=40.1+6, water of crystallization=54, equivalent of the crystallized salt=130.1.

Prop. Inodorous; taste strong, styptic; crystals light green, transparent rhomboidal prisms; soluble in two parts water: effloresce in the air, and turn yellow.

Oper. Tonic, emmenagogue, astringent, anthelmintic; in large doses emetic.

Use. In diseases of general debility, amenorrhœa, with a weak, languid pulse; diabetes; in clysters against ascarides.

Dose. Gr. j. to gr. v., combined with myrrh, ammoniacum, and bitter extracts.

Incomp. The earths, chloride of calcium, chloride of barium, alkalies, and their carbonates, biboras sodæ, nitras argenti, acetas plumbi, soaps, tannin.

Off. Prep. *Sulphas Ferri Exsiccatus*, E. *Pilula Ferri Compo* [illegible], L. *Ferri Sesquioxidum*, L. *Mist. Ferri Comp.*, L *Ferri Ferrocyanuretum*, U.S. *Ferri Oxidum Hydratum*, U.S *Ferri Phosphas*, U. S. *Ferri Subcarbonas*, U. S.

FERRI SULPHAS EXSICCATUM. E. Dried Sulphate of Iron.

Use. The same as the sulphate; intended for being administered in the form of pills.

Dose. Gr i. to gr. iij.

FERRI SULPHURETUM. D. E. Sulphuret of Iron. (Let an iron rod be heated in a wind furnace to a white heat, and immediately on taking it from the fire, let it be rubbed upon a roll of sulphur. Let the sulphuret of iron drop into water, and be separated from the sulphur, and dried. Keep it in a stoppered bottle.)

Use. The same as the hydro-sulphuret of ammonia.

FERRUGO. Ed. (*Hydrated Oxide of Iron. Hydrated Sesqui oxide of Iron.*) (*Sulph. of Iron* ℥iv., *Sulph. Acid* ʒiijss., *Nit. Acid* ʒix., *Aq. Ammoniæ* fʒxxviij. After treating the salt with the acids, filter, and add to the cold solution the ammonia in a full stream. The precipitate must be washed and dried at a temperature under 180°. The U. S. Phar. directs to take of *Sulphate of Iron* ℥iv., *Sulphuric Acid* fʒiijss., *Nitric Acid* fʒvj., or sufficient quantity, *Solution of Ammonia* a sufficient quantity, *Water* Oij. Dissolve the iron in the water, and having added the sulphuric acid, boil the solution; then add the nitric acid in small portions, boiling the liquid for a minute or two after each addition, until the acid ceases to produce a dark color. Filter the liquid, allow it to cool, and add solution of ammonia in excess, stirring the mixture briskly. Wash the precipitate with water until the washings cease to yield a precipitate with chloride of barium, and keep it in close bottles with water sufficient to cover it.)

Use. An antidote for poisoning with arsenic and its salts; acts by combining with arsenious acid, and rendering it insoluble.

Dose. ʒj. frequently repeated. This preparation of iron will remove arsenic from its solution in water, by adding 12 grains of it for every grain of the arsenic; of course it must be given in large quantities, and proportioned to the quantity of arsenic taken.

FERRUM ARSENIATUM. Arseniate of Iron.

Oper. Escharotic, discutient.

Use. Recommended by Mr. Carmichael in cases of cancerous ulcers; on which it acts more powerfully than any other agent. Of course the greatest caution is necessary in its use. Mr. Carmichael recommends ʒss. of the arseniate of iron with ʒij. of the phosphate of iron, and apply the mixture very thin by means of a camel's-hair pencil, over a portion of the ulcer when extensive; or it may be applied in the form of ointment, made by mixing ʒss. arseniate of iron, with ʒij. phosphate of iron and ʒvj. of lard. To be spread on lint and applied to the ulcer.

Dose. When given internally, gr. iij. of the arseniate may be mixed with ʒj. extract gentian, and ʒij. powder of liquorice, and divided into 48 pills, of which one may be given three times a day.

FERRUM BROMATUM. Bromide of Iron. (Heat equal parts of bromine and iron filings under water. As soon as the fluid becomes of a greenish color, it is filtered, and evaporated to dryness; the reddish residue again dissolved in water, and evaporated, is the bromide of iron.)

Prop. A brick-red color; dissolves readily in water, is deliquescent in the air, and has a very styptic taste.

Oper. Alterative.

Use. In all cases where bromine is indicated.

Dose. From gr. ss. to gr. j. twice a day, made into pills, with crumb of bread or extract of liquorice.

FICI. U. S.—L. E. See Caricæ Fructus.

FILICIS ASPIDII RADIX. L. FILIX. U. S.—E. Aspidii Filicis Maris Radix, D. Male Fern Root. (Aspidium *Filix Mas. Cryptogamia Filices.* N. O. *Filicales.* Indigenous. ♃.)

Prop. Odor weak; taste sweet, mucilaginous; slightly bitter and austere.

Oper. Anthelmintic.

Use. In tinea lata, and cucurbitina; but perhaps more is to be attributed to the active purgatives with which it is generally followed.

Dose. ʒ ij. to ʒ iij. of the solid part of the powdered root, taken in the morning, and soon after it a strong cathartic of gamboge or jalap, worked off with green tea. This was Madame Nouffler's celebrated remedy.

FŒNICULUM. U. S.—L. E. D. Fennel. (*Fœniculum vulgare.* N. O. *Labiatæ.* ♃.)

Prop. Odor aromatic; taste warm, sweetish; fruit ovate.

Oper. Carminative, diuretic.

Use. In flatulencies.

Dose. ℈j. to ʒj. bruised.

FŒNICULI SEMINA. U. S.—D. The Seeds of Sweet Fennel. (Fœniculum *graveolens*: class, order, and place, as above. ♃.) *Fœniculum dulce.*

Prop. Odor aromatic; taste sweetish and grateful.

Oper. Root diuretic; seed carminative.

Use. In the tormina of infants.

Dose. Gr. x. to ℈jss. in powder.

Off. Prep. *Aqua Fœniculi*, U. S.—L. D. *Oleum Volatile Seminum Fœniculi*, D. *Oleum Florum Fœniculi*, D. *Oleum Fœniculi Decoctum Chamæmeli*, D. *Spir. Juniperi Comp.*, U. S.—D. L.

FRASERA. U. S. (*Secondary.*) American Columbo. *Indig.* (*Tetrandria Monogynia.* N. O. *Gentianeæ.* The Root. ♃.)

Prop. Root long, spindle-shaped, horizontal, fleshy, yellow color, taste bitter and sweetish; virtues extracted by water and alcohol.

Oper A mild and valuable tonic.

Use. In all cases where a pure tonic is needed.

Dose. Of the powder from ʒ ss. to ʒ j.; of the infusion made with ℥i. of the bruised root to Oj. boiling water, ℥j. to ℥ij. several times a day.

FULIGO. Wood Soot. (That of hard wood, as hickory, is the best; and it should be collected from flues and stove-pipes at some distance from the fire.)

Comp. Its active principle is *creasote*, combined with potassa.

Prop. Taste saline, more or less bitter and acrid; nauseously empyreumatic.

Oper. Resolvent, alterative, antispasmodic, detergent, antiseptic, diaphoretic.

Use. Internally in cachexia, chronic rheumatism, cutaneous affections, glandular indurations, rickets, colic and diarrhœa of children, hysteria; externally, in tinea, porrigo, itch, herpes, cancer, ulcers and sores of every kind, ophthalmia, diptheritis, pruritus, chilblains, sore nipples, &c.

Dose. Of the *tincture*, made by infusing ℥ss. of soot with ℥jss. of carbonate of potassa, ʒ ij. carb. ammonia with ℥ ix. of water, and filtered; from thirty to sixty drops may be given several times a day. The *lotion* of soot is prepared by boiling ℥ ij. of clean soot in Oj. of soft water for a few minutes, and filtering through paper. The *ointment* is made by rubbing two parts of fresh butter, or hog's lard, with one part of soot. In painful tumors and cancers, the Extract of Belladonna forms a good addition. Pledgets wet with the lotion constitute one of our best applications in such cases.

GALBANUM. U. S.—L. E. Galbani Gummi Resina, D. Galbanum Gum-Resin. (Galbanum *Officinale. Pentandria Digynia.* N. O. *Umbelliferæ.* Cape of Good Hope. ♄.)

Comp. Resin, gummy extractive, volatile oil.

Prop. Odor fetid; taste bitter, acrid; the agglutinated tears of a white color, in a ground of reddish brown; forms an emulsion when triturated with water; soluble in proof spirit, wine, and vinegar. Spec. grav. 1.212.

Oper. Internally antispasmodic, deobstruent, expectorant; externally resolvent, discutient.

Use. In hysteria, particularly that which attends irregular and deficient menstruation; chlorosis; externally to indolent tumors.

Dose. Gr. x. to ʒj. in pills, or emulsion.

Of. Prep. Pilulæ Galbani Comp., U. S.—L. *Pilulæ Myrrhæ Comp.*, D. *Pilulæ Assafœtidæ*, E. *Tinct. Galbani*, D. *Emplast. Galbani*, L. D. *Empl. Assafœtidæ*, U. S.—E. *Empl. Gummosum*, E. *Emp. Galbani Comp.*, U. S.

GALLÆ. U. S.—L. E. D. Galls. (Quercus Infectoria. Dyer's Oak. *For class and order, vide Quercus Cortex.* Asia Minor. ♄.) The production of the wound of the ovipositor of the Diplolepsis Gallæ Tinctoriæ.

Comp. Tannic acid 130, mucilage 12, gallic acid and extractive 31, calcareous earth and saline matter 12, insoluble matter 315 grains in 500 galls. (*Davy*): but the goodness of the galls varies these results. The tannic acid consists of 18 eq. carbon=110.16 +9 hydrogen=9+12 oxygen=96, equiv. 215.16.

Prop. Inodorous; taste very austere and astringent; hard, ligneous, 4 to 12 lines in diameter, covered with tubercles; the color of the best is blackish-grey or blue; the unpierced are the best.

Oper. Powerfully astringent, tonic.

Use. They have been used in diarrhœa, intestinal hæmorrhages, and intermittents; but they are principally employed in gargles and injections; and the powder to form an ointment for piles in the proportion of ʒij. to lard ℥ij., and powdered opium ʒj

Dose. When exhibited internally, gr. x. to ℈j., twice or thrice a day.

Incomp. Lime water, potassæ carbonas, plumbi acetas, et diacetatis cupri sulphas, argenti nitras, ferri iodidum, ferri sulphas, antimonii potassio-tartras, hydrargyri nitras, hydrargyri bichloridum, infusum cinchonæ, solution of isinglass, solution of opium; all of which precipitate the infusion of galls.

GAULTHERIA. U. S. Partridge Berry. G. *Procumbens. Indigenous.* The Leaves. (*Decandria, Monogynia.* N. O. *Ericeæ.* Evergreen.)

Prop. Odor peculiar, aromatic, and pleasant; leaves astringent; contains tannin; aromatic properties reside in a volatile oil.

Oper. Stimulant, cordial, astringent, emmenagogue.

Use. In diarrhœa, amenorrhœa; but chiefly to flavor other medicines.

Dose. Of the infusion f℥ij. to f℥iv.: oil ♏ij. to ♏x.

Off. Prep. Ol. Gaultheriæ, U. S.

GENTIANA. U. S.—L. E. Gentianæ Luteæ Radix, D. Gentian Root. (*Pentand. Digyn.* N. O. *Gentianaceæ.* Mountains of Europe. ♃.)

Prop. Almost inodorous, extremely bitter; externally brown, wrinkled; internally yellow, spongy; flexible; virtues yielded to æther, alcohol, and water.

Comp. Gentianin, extractive, gum.

Oper. Tonic, stomachic, in large doses aperient; antiseptic.

Use. In dyspepsia, hysteria, jaundice; gout, united with aromatics; chlorosis with chalybeates; and dropsies, with squill and neutral salts. Externally in putrid ulcers.

Dose. Gr. x. to ℈ij. Vide Infusion, &c.

Off. Prep. Extractum Gentianæ, U. S.—L. E. D. *Infus. Gent. Comp.*, U. S.—L. E. D. *Tinct. Gent. Comp.*, U. S.—L. E. D. *Vinum Gent.*, E.

GENTIANA. U. S.—G. *Catesbei.* (Secondary.) (Blue Gentian. The Root. *Indigenous.* ♃.)

Prop. Dried root has a mucilaginous and sweetish taste, which is soon succeeded by an intense bitterness. Virtues extracted by water and alcohol.

Oper. Tonic.

Use. Intermittents, dyspepsia, general debility.

Dose. In powder, from gr. xv. to gr. xxx. In infusion, f℥j. to f℥iv.

GEOFFRÆÆ INERMIS CORTEX. D. Cabbage-Tree Bark. (*Diadelph. Decand.* N. O. *Leguminosæ.* Jamaica. ♄.)

Prop. Odor very unpleasant; taste sweetish, mucilaginous.

Oper. Anthelmintic, cathartic; deleterious in large doses.

Use. Against lumbrici and ascarides. Cold water must not be drunk during its operation.

Dose. Of the powder ℈j. to ℈ij., but decoction is a preferable form.

GERANIUM. U. S. (G. *Maculatum.* . Crane's Bill. *Monadelphia, Decandria.* N. O. *Geraniaceæ. Indigenous.* The Root. ♃.)

Comp. Tannin, gallic acid

Prop. Roots from one to three inches long, somewhat flattened, contorted, wrinkled, tuberculated, of an umber brown color;

inodorous; astringent, without bitterness or unpleasant taste; abounds in tannin.

Oper. A powerful astringent.

Use. Diarrhœa, and in the second stage of dysentery after evacuents; cholera infantum; passive hæmorrhages. An elegant remedy in cases of infants, or of persons with very delicate stomachs. Locally, to indolent ulcers, an injection in gleet and leucorrhœa, a gargle in relaxation of the uvula and aphthous ulcerations of the throat.

Dose. Of the powder, from gr. xx. to gr. xxx.; of the decoction, from ℥j. to ℥ij. It may be given to children boiled in milk.

GEUM URBANUM; RADIX. D. Common Avens Root. *Icosand. Monogyn.* N. O. *Rosaceæ.* Exotic. ♃.)

Prop. Odor not unlike that of cloves; taste bitterish, austere; externally dark red; internally white; virtues yielded to water and to alcohol.

Oper. Febrifuge, tonic.

Use. In intermittents, dysentery, chronic diarrhœa, flatulent colic, and general debility.

Dose. Of the powder, ʒss. to ʒj. four times a day; of a decoction, ℥j. every hour; of a tincture, formed with the root, ℥j. alcohol 0j.—ʒiiij. three or four times a day.

GEUM. U. S.—G. *Rivale.* (Secondary.) Water Avens. *Indigenous.* ⊙.

Prop. Dried root is hard, of a reddish or purple color, without smell, and of an astringent, bitterish taste.

Oper. Tonic, astringent.

Use. In diarrhœa, leucorrhœa, passive hæmorrhages, general debility.

Dose. Of the powdered root, from ℈j. to ʒj. three times a day, of the decoction, made with ℥j. of the root to 0j. of water, from f℥j. to f℥ij.; a weak decoction is sometimes made by invalids as a substitute for coffee.

GILLENIA. U. S.—G. *Trifoliata.* Bigelow. Indian Physic. American Ipecac. *Icosand. Pentagynia.* N. O. *Rosaceæ* *Indigenous.* The Root. ♃.)

Prop. Dried root of the thickness of a small quill; light brown color, bitter taste; virtues extracted by boiling water.

Oper. Emetic, cathartic; in small doses tonic.

Use. As a mild emetic where such medicines are indicated; as a substitute for ipecacuanha.

Dose. Of the powdered root, as emetic, from gr. xx. to gr. xxx., repeated every twenty minutes till it operates; as alterative and tonic, from gr. v. to gr. xv.

GLYCYRRHIZA. U. S.—L. Glycyrrhizæ Radix, D. E. Liquorice Root. (Glycyrrhiza *glabra.* *Diadelphia, Decand.* N. O. *Leguminosæ.* South of Europe. ♄.) Should be three years old.

Comp. Woody fibre, starch, and a peculiar modification of sugar called *glycion.* The fresh root yields one-fourth its weight of extract. (*Glycion*, or *glycyrrhizine*, and *mannite*, are forms of sugar, though they do not form alcohol by fermentation. Mannite is found in the juice of many trees, in most mushrooms, and in cane sugar, by decomposition.

Prop. Inodorous; taste sweet, mucilaginous, leaving, when unpeeled, a degree of bitterness in the mouth; flexible; cuticle brown.

Oper. Demulcent.

Use. In catarrh; but it is generally combined with other mucilages, and is a pleasant and useful demulcent

Dose. Of the powder, ʒss. to ʒj.

Off. Prep. *Decoct. Sarsaparillæ Comp.*, U. S.—L. E. D. *Infus. Lini*, U. S.—L. *Ext. Glycyrrhizæ*, U. S.—L. E. D. *Confectio Sennæ*, U. S.—L. E. *Decoctum Mezerei Comp.*, E D.

GOSSYPIUM. E. Raw Cotton.

Use. In burns and scalds.

GRANATUM. U. S.—L. Granatum Radix, E. Baccæ tunica exterior. Flores, Radicis Cortex, D. Pomegranate Bark and Flowers, (Balaustines,) and bark of the roots. (*Icosandria, Monogyn.* N. O. *Pomaceæ.* South of Europe. ♄.) *Balaustium.*

Comp. Wax, resin, clorophylle, gallic acid, tannin, fatty matter, *grenadine.*

Prop. Inodorous; taste bitter, styptic; strikes a permanent blue with sulphate of iron; virtues yielded to water.

Oper. Astringent, anthelmintic.

Use. In chronic and colliquative diarrhœas, and the protracted stage of dysentery; for tapeworm; externally, as an injection in leucorrhœa, and gargles in angina.

Dose. In substance ʒss. to ʒj., of a decoction f℥ss. every three hours.

Incomp. Sulphate of iron, iodide of iron, nitrate of silver, acetates of lead.

GUAIACI RESINA ET LIGNUM. U. S.—L. E. D. Guaiacum Resin and Wood. *Guaiacum.*

Prop. Odor slightly fragrant; taste warm and bitter, the resin more so than the wood. The resin is concrete, brittle; color externally greenish, internally greyish, ; fresh fracture reddish; water dissolves about one-tenth, alcohol 95 parts in 100; soluble also in liquor potassæ 15 parts; in liquor ammoniæ 38 parts. The powder is whitish, but changes to green in the air.

Oper. Stimulant, diaphoretic; in large doses purgative.

Use. In chronic rheumatism, gout, cutaneous diseases, and the sequela of lues venerea.

Dose. To produce its first effects, gr. v. to ℈j. in pills, or in emulsion made with mucilage or yolk of egg; to purge, gr. xv. to ʒj. in the same form.

Incomp. The mineral acids.

Off. Prep. *Decoc. Guaiaci*, E. D. *Decoc. Sarsap. Comp.*, U. S.—L. E D. *Mist. Guaiaci*, L. E. *Tinct. Guaiaci*, U. S.—L. E. D. *Tinct. Guaiaci Comp.*, U. S.—L. E. D. *Pulvis Aloes Comp.*, L. D.

⁂ *It is often adulterated with manchineel gum; to discover which, add to the alcoholic solution a few drops of sweet spirit of nitre, and dilute with water; the guaiac is precipitated blue, while the adulteration floats.*

HÆMATOXYLUM. U. S.—L. E. Hæmatoxyli Lignum, D Logwood. (*Decandria, Monogynia.* N. O. *Leguminosæ.* America. ♄.)

Prop. Almost inodorous; taste sweetish, sub-astringent; color deep red; firm, heavy. Its virtues extracted both by water and alcohol, (coloring principle *hematine.*)

Oper. Astringent? tonic.

Use. In the protracted stage of diarrhœa and dysentery, under the form of decoction. (℞ Of the shavings ℥j., water Oij Boil to Oj. and strain.)

Dose. f℥j. to f℥ij. every three or four hours.

Incomp. The mineral acids, acetic acid, solution of alum, sulphate of iron and of copper, acetate of lead, antimonii potassio-tartras. Opium, Decoction of Cinchona Flava.

Off. Prep. *Ext. Hæmatoxyli,* U. S.—L. *Decoctum Hæmatoxyli,* U. S.—E.

HEDEOMA. U. S. *Hedeoma Pulegioides.* Penny Royal. The Herb. *Indigenous.* (*Diandria, Monogynia.* N. O. *Labiatæ.* ♃.)

Prop. An annual plant, from nine to fifteen inches high; pleasant, aromatic smell; warm, pungent taste. Owes its properties to a volatile oil; extracted by warm water.

Oper. An aromatic stimulant, diaphoretic, diuretic, emmenagogue.

Dose. Of infusion ad libitum. Oil, from ♏i. to ♏x.

Off. Prep. *Ol. Hedeomæ,* U. S.

HELLEBŎRUS. U. S.—L. E. Hellebori Nigri Radix, D. Black Hellebore Root. (Helleborus *Officinalis.* *Polyandria, Polygynia.* N. O. *Ranunculaceæ.* Austria. ♃.)

Prop. Odor disagreeable; taste bitter, acrid, benumbing the mouth; impaired by drying and keeping.

Oper. Cathartic, hydragogue, emmenagogue.

Use. In mania and melancholia, dropsy, and in suppression of the menses in plethoric habits; but it may be questioned whether it is equal to jalap, &c. It is seldom got genuine.

Dose. Gr. x. to ℈j. purge strongly; to produce its other effects, gr. ij. to gr. iij. three times a day. Seldom used in substance.

Off. Prep. *Tinct. Helleb.,* L. D. *Ext. Helleb. Nig.,* D.

HEPATICA. U. S. (*Secondary.*) Hepatica *Triloba,* U. S. Liverwort. *Polyandria, Polygynia.* N. O. *Ranunculaceæ.* ♃.

Prop. Without smell; has a mucilaginous, somewhat astringent, and slightly bitterish taste. Water extracts all its active properties.

Oper. Demulcent, slightly tonic, astringent, diuretic, and deobstruent: has no very active virtues.

Use. In chronic coughs, hæmoptysis, and hepatic affections. The empirical preparations of this plant owe their efficacy to opium, which they contain in considerable quantities.

HERACLEUM. U. S. Heracleum *Lanatum.* Masterwort. Radix. The Root. *Pentandria, Digynia.* N. O. *Umbelliferæ.* *Indigenous.* ♃)

Prop. The root resembles that of common parsley; strong, disagreeable odor; very acrid taste; both leaves and root excite redness when applied to the skin.

Oper. Stimulant, carminative.

Use. In epilepsy, attended with flatulence and gastric disorder.

Dose. ʒij. to ʒiij. of the powdered root daily, long continued, with a strong infusion of the leaves at bed-time.

HEUCHERA. U. S. Heuchera *Americana.* Alum Root (*Pent.* and *Digyn.* N. O. *Saxifrageæ* *Indigenous* ♃.)

Prop. **Root horizontal, knotty, irregular, yellowish; has a strong styptic taste.**

Oper. **Very astringent.**

Use. **Where astringents are indicated; as a local application to ulcers and cancer; also as a styptic.**

HIRŬDO MEDICINĀLIS. L. D. Sanguisuga Officinalis. The Leech. (*C. Annelides, O. Abranchiatæ, F. Asetigoræ.*)

Prop. Body oblong, flattish; color on the back olive green, with four longitudinal stripes; the two central yellow, broken with black; two lateral yellow, entire; two intermediate black, and yellow chain; on the belly turkey blue, maculated with yellow; mouth and bite triangular; anal extremity a circular sucker *Hirudo decora.* The American Leech: back of a deep pistachio green color, with three longitudinal rows of square spots, placed on every fifth ring, and twenty-four in number; lateral rows of spots black, middle range of a light brownish orange color; belly of the same color, variously and irregularly spotted with black, sometimes four or five inches in length, but generally from two to three. Makes a smaller and more superficial incision than the European leech, and does not draw as much blood. Much employed in Philadelphia; obtained from Bucks and Berks counties, Pennsylvania.

Use. In every species of local inflammation, except the erysipelatous; particularly in ophthalmia, placed as near the eye as possible. The best mode of making them bite is to clean the part well with soap and water, then to dry it, and before applying the leech, to allow it to dry itself by crawling on a clean cloth; or the part may be scratched with the point of the lancet. Leeches will not bite when casting their skins, which they often change; nor in rooms in which there is any strong or offensive odor. The bleeding from leech bites, especially in infants, is often troublesome. Compression will generally arrest it. Lunar caustic, lint, cotton impregnated with alum solution, and cobweb, are often employed for the same purpose. If all other means fail, a suture with a fine thread will always succeed. When applied to young children, the physician should always be at hand to watch the bleeding, and arrest it when necessary. Much care is required in preserving leeches, as they are very liable to diseases. The water in which they are kept should be changed every day, and they should have access to mud or moss, by crawling through which the body is cleared of the slimy coat which forms on its skin, and is a principal cause of its disease and death.

HORDEUM. U. S.—L. E. Hordei Distichi Semina, D. Pearl Barley. (*Triand. Digyn.* N. O. *Graminaceæ.* The banks of the river Tamara. ⊙.) *Semina tunicis nudata.*

Comp. According to Proust, 100 parts of barley contain 32 of *starch*, 3 *gluten*, 5 *sugar*, 4 *gum*, 1 *yellow resin*, and 55 of *hordein*, a principle analogous to *lignin*. Other chemists find in it, in addition, *salts of lime*, *vegetable fibre*, *albumen*, and *diastase*, which has the remarkable property of converting starch into *dextrine* and the sugar of grapes, when mixed in the proportion of only 1 part of the former to 200 of the latter.

Prep. Taste sweetish, viscid; prepared granules roundish, of a pearly whiteness: consists almost entirely of starch.

Use. Vide Decoctum As it is apt to get musty, barley should always be washed before it is made into decoction.

Off. Prep. *Decoctum Hordei*, U. S.—L. D. *Decoct. Hord. Comp.*, L. D.

HYDRARGYRUM. U. S.—L. E. Hydrargyrum, D. Quicksilver. Mercury. (In its metallic state, uncombined.) *Hydrargyrus.*

Prop. Fluid above 39° below zero, and under 656° of Fahr.: bright, shining, of a silvery whiteness; spec. grav. when liquid 13.568.—(*Cavendish.*) Easily oxidized; equivalent=202.

Oper. Metallic quicksilver does not act on the body, even when taken into the stomach: oxidized, and combined with acids, it acts powerfully.

Use. It has been exhibited in constriction of the bowels, and intus-susception, from a notion that it would pass through the bowels by its gravity; but it rarely succeeds in such cases.

HYDRARGYRUM PURIFICATUM. D. The purification is performed by distilling the crude metal in an iron retort.

Use. For pharmaceutical purposes.

HYDRARGYRUM NITRICO-OXYDUM. U. S.—L. Hydrargyri Oxydum Rubrum, U. S. Oxydum Hydrargyri Rubrum, E. Oxydum Hydrargyri Nitricum, D. Nitric Oxide of Mercury. Red Oxide of Mercury. *Red Precipitate.* (A peroxide, probably containing some undecomposed acid.) *Hydrargyrus Nitratus Ruber. Take of Mercury* ℥ xxxvi., *Nit. Acid* f℥ xiv., *Water* Oij. Dissolve the mercury, with a gentle heat, in the acid and water previously mixed together, and evaporate to dryness. Rub the dry mass into powder, and heat it in a very shallow vessel till red vapors cease to rise.—*U. S. Phar.*

Comp. Quicksilver 82, oxygen 18 parts in 100; or 1 eq. mercury =202+2 oxygen=16, equiv.=218; when well prepared.

Prop. Small bright-red shining plates; insoluble in water, entirely soluble in chlorohydric acid. It emits no reddish fumes when heated, but yields oxygen, while the mercury either runs into globules, or is wholly dissipated.—*U. S. Phar.*

Oper. Stimulant, escharotic.

Use. In the proportion of gr. ss. to sugar gr. iv. it is blown into the eye to remove specks on the cornea; applied to chancres and foul ulcers, to cleanse and stimulate them, either sprinkled on the part in fine powder, or united with lard into an ointment.

Off. Prep. *Unguentum Hydrargyri Nitrico-Oxydi*, L. E. D. *Ung. Hydrargyri Oxydi Rubri*, U. S.

HYDRARGYRI OXYDUM. L. Pulvis Hydrargyri Cinereus, D. Oxide of Mercury. (These preparations differ, but the London is to be preferred, being a real oxide; the other is sub-nitrate of mercury and ammonia, mixed with an imperfect oxide.)

Comp. Quicksilver 90.16, oxygen 3.84, in 100 parts; or 1 eq mercury=202+1 oxygen=8, equiv.=210.

Prop. Color grey, insoluble.

Oper. Stimulant, antisyphilitic.

Use. This preparation is not apt to disorder the stomach and bowels, and is therefore often preferred in curing venereal complaints.

Dose. Gr. j. to gr. iij. in a pill twice a day.

HYDRARGYRI OXYDUM NIGRUM. U. S.—D. Black Oxide of Mercury. (*Calomelanos sublimati* partem unam, *Potassæ Causticæ*, *Aquæ Calefactæ*, partes quatuor. Rub them together until the oxide assumes a black color, and wash it often in water; finally, dry the oxide upon blotting paper, in a moderate heat.) *A protoxide.*

Comp. Mercury 96.61, oxygen 3.39=100.

Prop. Taste coppery; insoluble in water; wholly dissolved by acetic acid; becomes olive-colored by the action of light; wholly dissipated by a strong heat, and metallic globules are sublimed.

Use. In scrofula, cutaneous affections, and as an alterative in venereal diseases.

Dose. Gr. viij. to ℈j.

HYDRARGYRI BINOXYDUM. L. Hydrargyri Oxydum Rubrum, D. Bin or Red Oxide of Mercury. (*Hydrarg. Bichloridi* ℥iv., *Liq. Potassæ* f℥xxviij., *Aq. dist.* Ovj.; after the decomposition, wash well the powder, and dry it.)

Comp. Quicksilver 92.6, oxygen 7.4 in 100 parts; or 1 eq. mercury=202+2 oxygen=16, equiv. 218.

Prop. Oxide of a red color, brilliant; soluble in some of the acids without decomposing them. Entirely soluble in hydrochloric acid, and transformed into the bichloride.

Oper. Stimulant, escharotic, antisyphilitic; in large doses violently emetic.

Use. Owing to the violence of its operation, it is now seldom given internally, except when other mercurials fail. It is principally used as an escharotic, in the same manner as the nitric oxide, but should be reduced to the finest state of powder.

Dose. Gr. ss. to gr. j. in a pill with opium gr. ss., every night and morning: gr. iv. act as a violent emetic.

HYDRARGYRI BROMIDUM. Bromide of Mercury. (Bromine unites with mercury in at least two proportions, which have been called the *proto-bromide*, and the *deuto-bromide*, corresponding in their effects to calomel and corrosive sublimate.)

Prop. White, soluble in water, alcohol, and æther, and colored red or yellow by alkalies.

Oper. Alterative, diuretic, cathartic.

Use. Syphilis, cutaneous affections, scrofula, &c., rarely employed.

Dose. Gr. i. to gr. iv. of the *proto-bromide;* gr. 1·20th of the *deuto-bromide;* or gr. j. of the last may be dissolved in ʒj. sulphuric æther, of which from ♏x. to ♏xx. may be given in barley-water.

HYDRARGYRI CHLORIDUM CORROSIVUM. U. S. Hydrargyri Bichloridum, L. Sublimatus Corrosivus, E. Murias Hydrargyri Corrosivum, D. Bichloride of Mercury. Corrosive Sublimate. *Hydrargyrus Muriatus.* (℞ *Mercury* ℔ij., *Sulphuric Acid* ℔iij., *Chloride of Sodium* ℔jss. Boil the mercury with the sulphuric acid until the sulphate of mercury is left dry. Rub this, when cold, with the *Chloride of Sodium* in an earthenware mortar; then sublime with a gradually increasing heat.)—*U. S. Phar.*

Comp. Chlorine 26.48, mercury 73.52 in 100 parts; or, 1 eq. mercury=202+2 eq of chlorine=70.84, equiv.=272.84. Spec grav 5.200.

Prop. Taste acrid, styptic, metallic, durable; a white, compact, semi-transparent mass of right rhombic prismatic crystals; soluble in 11 parts of water at 60°, in 3.8 of alcohol; partially decomposed in solution by light. It is soluble in æther, hydrochloric acid, and solution of hydrochlorate of ammonia. Very soluble in æther, which extracts it from all other solutions; fusible by heat, sublimes without residue; potassa and lime-water cause with its solution a reddish or yellow, and ammonia a white precipitate.

Oper. Stimulant, antisyphilitic, alterative.

Use. In venereal complaints, with the greatest advantage, when a quick and general action is required; but its effects are often not permanent. In lepra, combined with antimonials; and in chronic rheumatism. Dissolved in the proportion of gr. iij. to water Oj., as a gargle in venereal sore throats; and a little stronger we have found it useful as a gargle in breaking the abscess in cynanche tonsillaris It is applied externally to tetters, and for destroying fungus; gr. iv. in water Oj., is a good wash in scabies. It may be given clysterways, when the stomach will not bear it. Great caution is necessary in using it externally.

Dose. Gr. 1-6th to gr ss. made into a pill, with extract of poppies, once in twenty-four hours. When swallowed as a poison, the best antidote is white of egg.—(*Orfila.*)

Incomp. Vide *Liquor Hyd. Bichloridi.*

Off. Prep. *Liquor Hydrargyri Bichloridi*, L. *Hydrargyri Binoxydum*, L. *Hydrargyri Ammonio-chloridum*, L. *Hydrargyri Biniodidum*, L. E. *Hyd Iodidum Rubrum*, U. S. *Hydrargyrum Ammoniatum*, U. S.

HYDRARGYRI PERSULPHAS. D. Persulphate of Mercury (*Hydrargyri Purificati. Acidi Sulphurici utriusque* partes sex, *Acidi Nitrici* partem unam. Expose to heat in a glass vessel, and augment the heat until the substance be completely dried and become white.)

Comp. Sulphuric acid 26.23, peroxide of mercury 70.82, water 2.95.

Prop. Color white; spec. grav. 6.444.

Oper. Emetic, alterative.

Use. Seldom used, except for preparing the following:—

HYDRARGYRI OXYDUM SULPHURICUM. D. Sulphuric Oxide of Mercury. (*Hydrargyri Persulphatis* partem unam, *Aquæ Calidæ* partes viginti. Rub them together in an earthen ware mortar, and pour off the supernatant liquor; wash the yellow powder with hot distilled water, as long as the effused fluid yields a precipitate with the solution of caustic potassa; finally, dry the sulphuric oxide of mercury.) *Turpeth mineral.*

Comp. Sulphuric acid 15.62, peroxide of mercury 84.38 in 100 parts.

Use. Emetic, stimulant; but seldom used, except occasionally as a sternutatory, in very small quantities, combined with starch.

HYDRARGYRI CHLORIDUM. L. H. Ch. Mite, U. S. Calomelas, E. Calomelas Sublimatum, D. Chloride of Mercury or Calomel. (A chloride by sublimation.) *Calomelas.* (℞ *Mercury* ℔iv., *Sulphuric Acid* ℔iij., *Chloride of Sodium*, ℔iij., *Distilled Water* q. s. Boil ℔ij. of the mercury with the sul phuric acid, until the sulphate of mercury is left dry. Rub this, when cold, with the remainder of the mercury, in an earthenware mortar, till they are thoroughly mixed. Add the chloride of sodium, and rub it with the other ingredients till all the globules disappear: afterwards sublime. Reduce the sublimed matter to very fine powder, and wash it frequently with boiling distilled water, till the washings afford no precipitate upon the addition of solution of ammonia; then dry it.)—*U. S. Phar.*

Comp. Chlorine 15.25, mercury 84.75, in 100 parts; or, 1 eq. mercury=202+1 chlorine=35.42, equiv.=237.42.

Prop. Inodorous, nearly insipid; requiring 1152 parts of water at 212° for its solution; formed in a compact, hard, shining, striated cake, which by pulverization and levigation is reduced to an impalpable, ivory-colored powder; spec. grav. 7.175. Sublimes without a residuum; not soluble in æther or alcohol; blackened by potassa, and the oxide of mercury which results is reduced by heat to the metallic state. Distilled water, after having been boiled with it, yields no precipitate on the addition of ammonia or nitrate of silver.—*U. S. Phar.*

Oper. Antisyphilitic, alterative; in large doses purgative.

Use. In venereal diseases and chronic hepatitis, combined with opium; in scrofula with cicuta; in convulsive affections with opium, camphor, assafœtida, &c.; in dropsies with squill, foxglove, and elaterium; and in rheumatism and lepra with antimonials, guaiacum, and other sudorifics. As a purgative in any case not attended with intestinal inflammation; generally united with purgatives, as gamboge, scammony, jalap, or rhubarb.

Dose. Gr. j. to gr. ij., night and morning, in a pill; if it do not purge, it gradually excites ptyalism: gr. iij. to gr. x. purge. Children bear larger doses than adults.

Incomp. Nitric and hydrochloric acids, alkalies, and their carbonates, lime-water, soaps, sulphurets, iron, lead, copper. The bicarbonates of the alkalies do not decompose it.

CALOMELAS PRÆCIPITATUM. D.* Precipitated Calomel (*Hydrargyri Purificati* partes septemdecem, *Acidi Nitric diluti* partes quindecem. The mercury being put into a glass vessel, pour the acid upon it, and as soon as the mixture ceases to effervesce, digest with a gentle heat, agitating occasionally for six hours; then augment the heat and let the liquor boil a little: pour it off from the undissolved mercury, and let it be quickly mixed with forty parts of boiling water, containing seven parts of chloride of sodium in solution; wash the precipitated powder with hot distilled water, as long as the effused liquid affords a precipitate with the solution of caustic potassa; let it then be dried.)

Prop., Comp., and Use. The same as those of the sublimed preparation.

HYDRARGȲRI SULPHURĒTUM NIGRUM. U. S. CUM SULPHURE. L. D. Sulphuret of Mercury with Sulphur

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* This preparation is placed here, although not in alphabetical order, that it may be among the other mercurial preparations.

Æthiops Mineral. (*Hydrarg. Purif.* ℔j., *Sulphuris Sub.* ℔j Rub them together until the globules disappear.)

Comp. 58 parts bisulphuret of mercury+42 of sulphur in 100 parts.

Prep. Wholly dissipated by heat; does not communicate a white stain to gold when rubbed upon it, and exhibits no mercurial globules under the microscope. Chlorohydric acid which has been boiled with it, produces no precipitate when poured into water.—*U. S. Phar.*

Oper. Alterative.

Use. In scrofula and cutaneous diseases.

Dose. Gr. v. to ʒss.

HYDRARGYRI BISULPHURETUM. L. D. Hydrargyri Sulphuretum Rubrum. U. S.—E. Red Sulphuret of Mercury. Bisulphuret of Mercury. Cinnabar. (Quicksilver combined with sulphur.) *Hydrargyrus Sulphuratus Ruber.*

Comp. Quicksilver 86.2, sulphur 13.8 parts in 100; or 2 eq. of sulphur=32.2+1 mercury=202, equiv.=234.2.

Prep. Inodorous, insipid; color a rich deep-red; insoluble in water and in alcohol.

Oper. Antisyphilitic.

Use. As a fumigation against venereal ulcers of the nose, mouth and throat; ʒss. being thrown on a red-hot iron. It has also been used in cutaneous complaints and gouty affections; but i is at best an uncertain remedy.

HYDRARGYRI BICYANIDUM. L. Hydrargyri Cyanuretum Bicyanide of Mercury. Cyanuret of Mercury. (*Ferri Percyanidi* ℥ viij., *Hydrargyri Binoxydi* ℥ x., *Aq. dist.* Oiv. Boil for half an hour, strain and evaporate to form crystals.)

Comp. 1 eq. of mercury=202+2 eq. of cyanogen=52.73, equiv =254.78.

Prop. Crystals right square prisms, inodorous, taste metallic, more soluble in water than in alcohol, soluble in nitric acid without decomposition.

Oper. Excitant and alterative.

Use. Rarely employed as a medicine; chiefly used for making Hydrocyanic acid.

Off. Prep. *Acidum Hydrocyanicum*, L.

HYDRARGYRI IODIDUM. U. S.—L. Iodide of Mercury. Protiodide of Mercury. (*Hydrargyri* ℥j., *Iodinii* ʒv., *Alcoholis* q. s. Rub together until the globules disappear, and dry with a gentle heat, and keep in a close-stopped bottle.)

Comp. 1 eq. mercury=202+1, iodine=126.3, eq.=328.3.

Prep. A greenish yellow powder readily decomposed by heat; inodorous, taste strongly metallic, insoluble in water, alcohol, or solution of chloride of sodium; soluble in æther: heated quickly it sublimes in red crystals, which afterwards become yellow.

Oper. Excitant, alterative.

Use. In strumous affections and lepra: as an external application. The iodides of mercury are among our most powerful alteratives, uniting in their effects the properties of both their constituents. They affect the mouth more speedily than other mercurials, and are particularly indicated in scrofula and secondary syphilis, in scrofulous habits. Externally, they are used successfully in ulcers, ill-conditioned sores, swelled joints where we wish to promote the action of the absorbents; and neuralgic affections.

Dose. Gr. ½ to gr. ij. in pill or dissolved in alcohol.

HYDRARGYRI IODIDUM RUBRUM. U. S. Hydrargyri Biniodidum. L. E. Red Iodide of Mercury, U. S. (Biniodide of Mercury.) (*Hydrargyri* ℥j., *Iodinii* ʒx., *Alcoholis* q. s.; or, take of *Corrosive Sublimate* ℥j., *Iodide of Potassium* ʒx., *Distilled Water* Oij. Dissolve the mercury in Ojss., and the iodide of potassium in Oss. of the distilled water, and mix the solutions. Collect the precipitate upon a filter, and having washed it with distilled water, dry it with a moderate heat, and keep it in a well-stopped bottle.)—*U. S. Phar.*

Comp. 1 eq. mercury=202+2 iodine=252.6, equiv. 444.6.

Prop. A scarlet-red powder, subliming in rhombic scales; insoluble in water; soluble in boiling alcohol. Sublimed entirely—soluble in 40 parts of a hot concentrated solution of chloride of sodium; deposited in crystals on cooling.

Dose. Gr. 1-10th to gr. ½ a day.

HYDRARGYRI SULPHAS FLAVUS. U. S. Yellow Sulphate of Mercury. (*Turpeth Mineral.*) ℞ Of *Mercury* ℥iv., *Sulphuric Acid* ℥vj. Mix in a glass vessel, and boil by means of a sand bath till a dry white mass remains; rub this into powder, and throw it into boiling water; pour off the supernatant liquor, and wash the yellow precipitated powder repeatedly with hot water; then dry it.

Prop. A lemon-yellow powder, almost insoluble in water; entirely dissipated by heat, sulphuric acid being evolved, and metallic globules sublimed

HYDRARGYRUM CUM CRETA. U. S.—L. E. D. Mercury with Chalk. (A protoxide, formed by trituration with carbonate of lime. *Take of Mercury* ℥iij., *Prepared Chalk* ℥v. Rub together till all the globules disappear.)

Comp. Very uncertain, depending on the degree of trituration. Fourcroy states it to contain 4.100 of oxygen.

Prop. Inodorous, insipid; color grey.

Oper. Alterative, antisyphilitic?

Use. In porrigo, and other cutaneous affections; in venereal complaints its operation is so slow and weak as to merit no attention. An alterative in visceral diseases of children, especially in chronic diarrhœa and cholera infantum.

Dose. Gr. v. to ʒss. twice a day, in any viscid substance.

Incomp. Acids and acidulous salts.

HYDRARGYRUM CUM MAGNESIA. D. Mercury with Magnesia. (A protoxide, formed by trituration with carbonate of magnesia.)

In every respect this preparation resembles the former; the employment of the carbonate of magnesia instead of chalk does not alter the properties nor the virtues of the remedy.

HYDRARGYRUM AMMONIATUM. U. S. Hydrargyri Ammonio-Chloridum. L. Hydrargyri Precipitatum Album, E. Submurias Hydrargyri Ammoniatum. D. Ammonio chloride, or White Precipitated Mercury. White Precipitate. (A binoxide, combined with bichloride of mercury and ammonia, forming a triple salt.)

Comp. 1 eq. binoxide of mercury=218+1 bichloride of mercury =272.84+2 ammonia=34.30, equiv.=525.14.

Prop. Inodorous, tasteless, snowy white, ponderous, insoluble in water or alcohol, soluble in chlorohydric acid, entirely dissipated by a strong heat; it does not become black when triturated with lime-water; but with potassa it becomes yellow.

Oper. Detergent.

Use. As an external application, united with lard, in scabies, and some other cutaneous affections.

Off. Prep. *Ung. Hydrargyri Ammonio-chloridi*, L. *Ung. Hydrargyri Precip. Albi*, D. *Unguentum Hydrargyri Ammoniati*, U. S.

HYDRO-SULPHURĔTUM AMMONĪÆ. D. Hydrosulphuret of Ammonia.

Prop. Odor very fetid; taste nauseous, styptic; color dark yellowish green.

Oper. Sedative, nauseating, emetic; disoxygenizing?

Use. In diabetes, and diseases of increased excitement.

Dose. ♏v. gradually to ♏xv. three or four times a day; larger doses produce vomiting.

Incomp. All the acids and metallic solutions.

HYOSCYĂMI FOLĪA ET SEMĪNA. U. S.—L. D. Hyoscyamus, E. Henbane Leaves and Seeds. (Hyoscyamus Niger. *Pentand. Monogyn.* N. O. *Solanaceæ.* Europe. ♂.)

Comp. The seeds yield (Brande) 24.2 per cent. of fixed oil, 1.4 fatty matter, 1.2 of gum, 2.4 of bassorin, 1.50 of starch, 4.5 of albumen, 26.0 of vegetable fibre, 24.1 water, 9.7 saline matter, including an alkaline principle, called hyoscyanine, which crystallizes in long prisms, and has a very strong taste.

Prop. Odor narcotic, peculiar; not unlike tobacco when bruised; taste insipid, mucilaginous, lost by drying; virtues yielded to proof spirit.

Oper. Narcotic, anodyne, antispasmodic, slightly stimulant.

Use. In epilepsy, hysteria, palpitation, palsy, mania, and scirrhus, as a substitute for opium to procure sleep in nervous habits, pertussis, asthma, catarrh, gout, rheumatism, externally as a cataplasm in cancer and glandular swellings; and to dilate the pupil, or in fine powder sprinkled on cancerous sores, to allay pain.

Dose. Gr. iij. to gr. x. of the powder; but generally the extract is preferred.

Off. Prep. *Extractum Hyoscyami*, U. S.—L. E. D. *Tinctura Hyoscyami*, U. S.—L. E. D.

HYSSOPUS OFFICINALIS. *Herba.* Ed. Common Hyssop. Hyssop Leaves. (*Didynamia Gymnosperm.* N. O. *Labiatæ.* Europe.)

Prop. Odor aromatic, taste warm, pungent, depending on an essential oil.

Oper. Stimulant, expectorant attenuant.

Use. In humoral asthma and chronic catarrh; seldom used.

Dose. ℈j. to ʒj. twice or thrice a day; or the infusion may be freely drank.

CHTHYOCOLLA. U. S. Isinglass. (Accipenser Huso et Ruthenus.) Sounds of the swimming bladders of fishes, as the Weak Fish and Cod, but especially the different species of sturgeon. (*Pisces*, *Chondropterygii.* *Cuv.* Russia.)

Comp. Soluble gelatine 98, insoluble fibre 2 parts in 100.

Prop. Inodorous, tasteless, dry, whitish, semitransparent; when dissolved in boiling water it forms an opaque jelly.

Oper. Nutritive, demulcent, externally adhesive.

Use. As a diet for the sick and convalescent, and infants troubled with acidity of the primæ viæ. As an article of diet in cholera infantum, far preferable to vegetable farinaceous substances, as arrowroot, &c. The English court-plaster is made with it.

Incomp. Astringent vegetable infusions, carb potash, alcohol.

INFUSUM ANTHEMIDIS. U. S.—L. E. Infusion of Chamomile. (*Anthemidis* ʒ v., *Aq. Fervent.* Oj. Macerate for ten minutes in a covered vessel, and strain.)

Prop. The odor and taste of the flowers.

Oper. Tonic; emetic when taken warm.

Use. The cold infusion in dyspepsia, hysteria, and other complaints attended with debility of the stomach; the warm is employed either alone to excite gentle vomiting, or to assist the operation of other emetics.

Dose. f℥j. to f℥ij.

Incomp. Isinglass; infusions of yellow cinchona; solutions of sulphate of iron, nitrate of silver, bichloride of mercury, acetates of lead.

INFŬSUM ARMORĂCĬÆ. U. S.: COMPOSĬTUM. L. D Compound Infusion of Horse Radish. (*Armor. concisæ, Sinapis contusi, sing.* ℥j., *Spiritus Armoraciæ Comp.* f℥j., *Aquæ Ferv.* Oj Macerate for two hours in a covered vessel, then strain, and add the Spir. Armoraciæ Comp.)

Prop. Little odor; a mawkish, acrid taste.

Oper. Stimulant, diuretic.

Use. In paralysis, scorbutus, chronic rheumatism, and dropsies occurring after intermittents.

Dose. f℥j. to f℥iij. three or four times a day.

Incomp. Carbonate of alkalies, bichloride of mercury, nitrate of silver, infusions of galls, and of cinchona.

INFŬSUM AURANTĬI COMPOSITUM. L. D. Infusum Aurantii, E. Compound Infusion of Orange Peel. (*Aurant. Cor. sic.* ʒiv., *Limon. Cort. recent.* ʒij., *Caryophyll. contus.* ʒj., *Aq. Ferv.* Oj. Macerate for fifteen minutes in a covered vessel, and strain.)

Oper. Tonic, stomachic, stimulant, carminative

Use. In dyspepsia, particularly that of drunkards; flatulent colic; in gout, united with absorbents; and in the debility which follows acute diseases.

Dose. f℥jss. to f℥ij. every four hours

Incomp. Sulphas ferri, acetas plumbi, infusion of yellow cinchona bark, lime-water.

INFŬSUM CALUMBÆ. L. E. D. Inf. Colombæ, U. S. Infusion of Calumba. (*Calumbæ concisæ* ʒv., *Aquæ Ferv.* Oj. Macerate for two hours in a slightly covered vessel, and strain.)

Prop. Odor and taste of the root; mucilaginous.

Oper Tonic without stimulating; antiseptic.

Use. In dyspepsia and cholera, the vomiting of which it checks · in bilious remittent fever; to check the nausea and vomiting of pregnancy; and the severe diarrhœa and vomiting often attending dentition; in the hectic of phthisis, to correct acrimery, and strengthen the digestion; and in the low state of puerperal fever.

Dose. f℥ jss. to f℥ ij. three or four times a day.

Incomp. Antimonii potassio-tartras, hydrargyri bichloridum, nitras argenti, acetas plumbi; infusion of cinchona.

INFŪSUM CARYŎPHYLLI. U. S.—L. E. D. Infusion of Cloves. (*Caryophyl. contus.* ℨ iij., *Aq. Fervent.* Oj. Macerate in a covered vessel for two hours, and strain.)

Prop. Odor fragrant; taste warm, aromatic; color red.

Oper. Stimulant, tonic, stomachic.

Use. In atonic gout, when the stomach is affected; and flatulent colic.

Dose. f℥ jss. to f℥ ij. three or four times a day.

Incomp. Sulphas ferri; sulphas zinci; antimonii potassio-tartras, nitras argenti; acetas plumbi; infusion of cinchona.

INFŪSUM CASCĂRILLÆ. U. S.—L. E. D. Infusion of Cascarilla. (*Cascarilla Cort. cont.* ℥ iss., *Aq. Ferv.* Oj. Macerate for two hours in a covered vessel, and strain.)

Prop. Odor aromatic; taste bitter and aromatic.

Oper. Tonic, stomachic.

Use. In alvine fluxes, particularly after measles; in the aphtha gangrenosa of children.

Dose. f℥ jss. to f℥ ij. for adults twice or thrice a day.

Incomp. Infusions of galls, and yellow cinchona; lime-water; solutions of sulphate of iron, nitrate of silver, acetates of lead.

INFŪSUM CATĔCHU COMPOSĬTUM. U. S.—L. D. Infusum Catechu, E. Infusion of Catechu. (*Catechu Extracti* ℨ j., *Cinnam. Cort. contusi* ℨ j., *Aquæ Fervent* Oj. Macerate for an hour, and strain.) *Infusum Catechu.*

Oper. Astringent, stomachic.

Use. In diarrhœas from a laxity of the bowels.

Dose. f℥ j. to f℥ ij. every three hours, or after every loose stool.

Incomp. Tartar emetic, sulphate of iron, sulphate of zinc, solution of isinglass, infusion of cinchona, the strong acids, bichloride of mercury.

INFŪSUM CHIRETTÆ. E. Infusion of Chiretta. (*Chiretta* ℨ iv., *Boiling Water* Oj. Infuse for two hours, and strain through linen or calico.)

Prop. An agreeable bitter.

Oper. Tonic.

Use. In atonic dyspepsia, and in general debility.

Dose. From f℥ j. to f℥ ij. twice or thrice a day.

INFŪSUM CINCHŌNÆ. U. S.—L. E. D. Infusion of Cinchona. (*Cinch Lancifoliæ Cort. contusi* ℥ j., *Aquæ Ferv.* Oj. Macerate for six hours, and strain. L. The Comp. Inf. of Per. Bark of the U. S Phar. is prepared in the same manner, adding ℨ j. aromatic sulphuric acid.)

Prop. The peculiar aromatic flavor and bitterness of the bark employed.

Oper. Tonic, stomachic.

Use. In dyspepsia and convalescences.

Dose. f℥ j. to f℥ ij. united with some aromatic tincture, or a mineral acid, three or four times a day.

Incomp. Tartar emetic, sulphates of iron and of zinc, nitrate of silver and bichloride of mercury, acetates of lead. Decoction of galls, lime-water, carbonates of alkalies, and infusions of almost all the vegetable bitters.

INFUSUM CINCHONÆ CUM SUCCO LIMONUM. U. S. Infusion of Cinchona with Lemon Juice. (*Cinchonæ in pulvere* ℥j., *Succi Limonum* f℥ij., *Tinct. Camph. Comp.* fʒiij., *Aquæ Frigidæ* Oj. Macerate for twelve hours in a covered vessel, and strain.)

Use. In cases requiring bark, attended with great irritability of stomach.

Dose. f℥j. to f℥iij.

INFŪSUM CUSPĀRĬÆ. L. E. Infusum Angusturæ, U. S.—D. Infusion of Cusparia. (*Cuspariæ Cort. contusi* ʒv., *Aquæ Fervent.* Oj. Macerate for two hours, and strain.)

Prop. Almost inodorous; taste bitter, and slightly aromatic.

Oper. Tonic, antiseptic.

Use. In febrile diseases, obstinate bilious diarrhœa, and dysentery, after proper evacuations.

Dose. f℥j. to f℥ij. three or four times a day.

Incomp. Infusion of galls, and of catechu; tartar emetic; sulphates of iron and of zinc; nitrate of silver, bichloride of mercury, acetates of lead.

INFŪSUM DIGITĀLIS. U. S.—L. E. D. Infusion of Foxglove. (*Digitalis Fol. exsiccat.* ʒj., *Spir. Cinnamomi* ℥j., *Aq. Ferv.* Oj., L. *Digitalis* ʒij., *Spirit of Cinnamon* fʒij., *Boiling Water* ℥xviij., E. Macerate for four hours, strain, and add *Spir. Cinnam.* fʒiv.

Prop. Inodorous, taste bitter and nauseous.

Oper. Diuretic, sedative.

Use. In dropsies, humoral asthma, phthisis pulmonalis; and in diseases of increased action.

Dose. f℥ss. to f℥j. every eight or ten hours, till it affects the kidneys, the pulse, stomach, or bowels; and then stopped.

Incomp. Sulphas ferri, acetas plumbi; infusion of yellow cinchona.

INFŪSUM DIOSMÆ. U. S.—L. Infusum Bucku, E. D. Infusion of Buchu. (*Foliorum Diosmæ crenatæ* ℥j., *Aquæ Ferventis* Oj. Digest for four hours, and strain through cloth.)

Prop. Odor aromatic; taste slightly bitter, aromatic, and cooling, resembling peppermint.

Oper. Stimulant, diuretic.

Use. In chronic inflammation of the mucous membrane of the bladder.

Dose. f℥j to f℥ij. twice or thrice a day.

INFŪSUM EUPATORII. U. S. Infusion of Thoroughwort. (℞ Of *Thoroughwort,* the dried herb, ℥j., *Boiling Water* Oj Macerate two hours in a covered vessel, and strain.)

Prop. Odor fragrant; taste bitter.

Oper. Cold, tonic; when warm, diaphoretic, emetic.

Use. As a diaphoretic, in catarrh and colds, drank freely, warm. The cold infusion is an excellent mild tonic, in dyspepsia and intermittents.

Dose. f℥j. to f℥ij. three or four times a day.

INFŪSUM GENTĬĀNÆ COMPOSĬTUM. U. S.—L. D. Infusum Gentianæ, E. Compound Infusion of Gentian. (*Gentianæ Rad. concisæ, Aurantii Cort. exsic., sing.* ʒij., *Limonis Cort. recent* ʒiv., *Aq. Ferv.* Oj.)

Oper. Tonic, stomachic.

Use. In dyspepsia and chlorosis, united with chalybeates, or with alkalies; diarrhœa and gout, with absorbents and aromatic tinctures; and in dropsy, with squill and neutral salts.

Dose. f℥ jss. to f℥ ij. three times a day.

Incomp. Acetates of lead.

⁂ *The Edinburgh and Dublin Colleges order the ingredients to be previously macerated in* f℥ iv. *of proof spirit.*

INFŪSUM KRAMERIÆ. U. S.—L. Infusion of Rhatany (*Krameriæ* ℥ j., *Aquæ dist. ferv.* Oj. Macerate for four hours in a covered vessel, and strain.)

Prop. Earthy odor; taste powerfully astringent.

Oper. Tonic, astringent.

Use. In chronic diarrhœa; as a gargle in relaxation of the uvula.

Dose. f℥ iss. to f℥ ij.

INFŪSUM LĪNI COMPOSĬTUM. L. D. Infusum Lini, U. S. —E. Infusion of Linseed. (*Lini Usitatis. Sem. contus.* ʒ vj., *Glycyrrh. Rad. con.* ʒ ij., *Aquæ Ferv.* Oj. Macerate for four hours, near the fire, and strain.)

Prop. Inodorous, sweetish, mucilaginous

Oper. Demulcent.

Use. In catarrh, pneumonic affections, strangury, gonorrhœa; and after operations on the urethra or the bladder

Dose. A teacupful ad libitum.

Incomp. Alcohol, acetates of lead.

INFŪSUM LUPULI. U. S.—L. *Infusum Humuli,* U. S. Infusion of Hop. (*Lupuli* ʒ vj., *Aquæ dist. ferv.* Oj. Macerate for four hours, and strain.)

Prop. Taste aromatic, bitter, odor agreeable.

Oper. Tonic, slightly narcotic.

Dose. f℥ j. to f℥ ij.

INFŪSUM MENTHÆ SIMPLEX. D. Simple Infusion of Mint. (*Foliorum Menthæ Viridis siccatorum* ʒ ij., *Aquæ Ferventis q. s. ut colentur* mensura ℥ vj.)

Use. A good diluent in febrile diseases.

INFŪSUM MENTHÆ COMPOSĬTUM. D. Compound Infusion of Mint. (*Fol. Menth. Sat. siccat.* ʒ ij., *Aq. Ferv. q. s. ut colentur* f℥ vj. Macerate for half an hour in a covered vessel, and when cold, strain; then add *Sacch. Albi* ʒ ij., *Olei Menth. Sat.* gtt. iij. dissolved in *T. Card. Com.* ℥ ss.)

Oper. Gently stimulating, diaphoretic.

Use. In anorexia, and as a vehicle for disagreeable remedies.

Dose. f℥ j. to f℥ ij. occasionally.

INFŪSUM PAREIRÆ. L. E. Infusion of Pareira. (*Pareiræ* ʒ vj., *Aq. Ferv.* Oj. Macerate for two hours, and strain.)

Oper. Slightly tonic, diuretic.

Dose. f℥ jss. to f℥ ij. The extract is usually added to the infusion.

INFŪSUM PRUNI VIRGINIANÆ. U. S. Infusion of Wild Cherry Bark. (Take of *Wild Cherry Bark* bruised ℥ ss., *Cold Water* Oj. Macerate for twenty-four hours, and strain.)

Prop. Beautifully transparent, color of Madeira wine, slightly bitter, and astringent.

Oper. Tonic and antispasmodic, narcotic.

Use. As a tonic, where there is much nervous excitability with a debilitated condition of the stomach and bowels, together with general or local irritation. Improves the appetite, induces sleep, calms nervous irritability, and allays the action of the heart and arteries. Highly useful in the hectic fever of scrofula and consumption, dyspepsia, intermittents, &c.

Dose. f ℥ ij. to f ℥ iij. three or four times a day.

INFŪSUM QUASSĬÆ. U. S.—L. E. D. Infusion of Quassia (*Quassiæ concisæ* ℈ij., (ʒj. E.), *Aquæ Ferv.* Oj. Macerate for two hours, and strain.)

Prop. Inodorous; taste a very pure bitter; limpid; possessing no astringency.

Oper. Tonic, antiseptic.

Use. In bilious fevers, united with alkaline salts; hysteria, with camphor and tincture of valerian; gout, with aromatics and ginger; and in dyspepsia, with sulphate of zinc, or with mineral acids.

Dose. f ℥ j. to f ℥ ij. twice or thrice a day.

Incomp. Acetas plumbi, nitras argenti.

INFŪSUM RHEI. U. S.—L. E. D. Infusion of Rhubarb. (*Rhei concisi* ʒiij, *Aq. Ferv.* Oj., L. *Powdered Rhubarb* ℥ j., *Spirit of Cinnamon* f ℥ ij., *Boiling Water* f ℥ xviij., E. Macerate for two hours in a covered vessel, and strain.)

Prop. Odor fragrant, like that of the root; taste bitter and aromatic; limpid; red-yellow; not so astringent as the root.

Oper. Purgative, stomachic.

Use. In costiveness; and, united with ginger and aromatics, in diarrhœas from weakness of the bowels.

Dose. f ℥ j. to f ℥ iij. united with neutral salts; f ℥ ss. with tinct. of cinnamon, where its stomachic effect only is required.

Incomp. Solution of isinglass, infusion of yellow cinchona, al the strong acids, nitrate of silver, bichloride of mercury, acetates of lead, sulphate of iron, tartar emetic, magnesia.

INFŪSUM ROSÆ COMPOSĬTUM. U. S.—L. Infusum Rosæ, E. Infusum Rosæ Acidum, D. Infusion of the Rose. (*Rosæ Gallicæ Petal. exsicc.* ʒiij., *Aquæ Ferventis* Oj., *Acidi Sulph. dilut.* f ʒ jss., *Sacch. Purif.* ʒ vj. After pouring the water on the petals, in a glass vessel, add the acid, and macerate for half an hour; then strain, and add the sugar.)

Prop. Odor of the rose; taste slightly austere, acid, and sweet.

Oper. Sub-astringent, refrigerant.

Use. In the colliquative sweats of phthisis; and, with additional acid and some nitre, in uterine and pulmonary hæmorrhages; topically as a gargle in cynanche tonsillaris. The infusion is an elegant vehicle for many active remedies, particularly sulphate of magnesia, the nauseous taste of which it covers.

Dose. f ℥ iss. to Oss. every three or four hours.

Incomp. Sulphates of iron and of zinc, alkalies, earths.

INFŪSUM SARSAPARILLÆ. U. S.: COMPOSĬTUM. D. Compound Infusion of Sarsaparilla. (*Radicis Sarsaparillæ, prius aqua frigida mundatæ et dein incisæ*, ℥ j., *Aquæ Calidæ* mensura ℔j. Macerate for twelve hours in a closed vessel, occasionally agitating, then strain.)

Prop. and *Use.* The same as the decoction.

Dose. f ℥ iv. to f ℥ viij. twice a day.

INFŪSUM SCOPARII. L. Infusion of Broom. (*Scoparii* ℥ j., *Aq. dist. ferv.* Oj. Macerate for four hours, and strain.)

Oper. Aperient, diuretic.
Dose. ℥ jss. to ℥ ij

INFUSUM SENNÆ, U. S.: COMPOSITUM L. D. Infusum Sennæ, E. Infusion of Senna. (*Sennæ Fol.* ʒ xv., *Zingiberis con.* ℈ iv., *Aquæ Ferv.* Oj. Macerate for an hour in a covered vessel, and strain.) *Infusum Sennæ Simplex.*
Oper. Purgative.
Use. In costiveness, and to move the bowels in acute diseases; the ginger counteracts the griping quality of the senna. It is generally united with neutral purgative salts and manna.
Dose. f℥ j. to f℥ iv.
Incomp. The same as of infusion of senna, and also all salts having potassa for a base.

INFUSUM SERPENTARIÆ. U. S.—L. E. Infusion of Virginia Snake Root. (*Serpentariæ* ʒ iv., *Aquæ dist. fervent.* Oj Macerate in a covered vessel for four hours, and strain.)
Oper. Excitant, diaphoretic.
Dose. f℥ j. to f℥ ij.
Incomp. Strong acids, lime-water, the alkaline carbonates, solutions of nitrate of silver, bichloride of mercury, acetates of lead, tartarized antimony, and infusion of yellow cinchona.

INFUSUM SENNÆ COMPOSITUM. E. Infusum Sennæ cum Tamarindis, D. Infusion of Tamarind and Senna (*Fruct. Tamarindi* ℥ j., *Sennæ* ʒ j., *Sem. Coriand. contus.* ʒ j., *Sacch. non purif.* ℥ ss., *Aq. bull.* ℥ viij. Macerate in a vessel not glazed with lead, agitating occasionally, for four hours, and strain.)
Oper. Mildly purgative and cooling.
Use. In delicate habits, and inflammatory diseases.
Dose. f℥ ij. to f℥ iv.

INFUSUM SIMAROUBÆ. L. E. D. Infusion of Simarouba. (*Simaroubæ contusi* ʒ iij., *Aquæ Ferv.* Oj. Macerate for two hours in a covered vessel, and strain.)
Prop. Inodorous; bitter, but not astringent.
Oper. Tonic, antiseptic; emetic in large doses.
Use. In diarrhœa, and the advanced stage of dysentery; dyspepsia; leucorrhœa; and intermittent fevers.
Dose. f℥ ij. united with opium, or with an aromatic, every three or four hours.
Incomp. Decoction of galls, infusion of catechu and yellow cinchona, solutions of nitrate of silver, bichloride of mercury, acetate of lead, alkaline carbonates, lime-water.

INFUSUM SPIGELIÆ. U. S. *Infusion of Pink Root.* (℞ *Root* ℥ ss., *Boiling Water* Oj. Macerate two hours.)

INFUSUM TABACI. U. S.—D. Infusion of Tobacco. (*Tabaci Fol.* ʒ j., *Aquæ Ferv.* Oj. Macerate for an hour in a covered vessel, and strain.)
Oper. Sedative, antispasmodic.
Use. As a clyster in ileus, colica pictonum, strangulated hernia, and retention of urine from spasm of the urethra. It is, however, a very dangerous remedy, and not over one-third of Oj. should be administered at once.

INFUSUM ULMI. Infusion of Slippery-Elm Bark. U. S. (℞ *Bark of Slippery Elm* ℥ j., *Boiling Water* Oj. Macerate two hours.)

INFŪSUM VALERIĀNÆ. U. S.—L. D. Infusion of Valerian. (*Valerianæ* ʒ iv., *Aquæ Fervæ.* Oj. Macerate for half an hour, and when cold, strain.)

Oper. Tonic, antispasmodic.

Use. In hysteria, when the stomach will not bear the powder.

Dose. f℥jss. to f℥ ij. twice or thrice a day.

Incomp. Nitrate of silver, sulphate of iron, infusion of yellow cinchona.

INULA. U. S (*Secondary.*) L. Elecampane. (Inula *Helenium. Syngenesia Superflua.* N. O. *Compositæ.*) *Radix.*

Prop. Odor slightly fetid, taste at first soapy and rancid, then aromatic, bitter, hot.

Oper. Tonic, diuretic, expectorant.

Use. In dyspepsia, paralysis, dropsies, asthma.

Dose. ℈ j. to ʒ j. in powder.

Off. Prep. *Confectio Piperis Nigri*, L. D.

IODINUM. U. S. Iodinum, L. D. Iodineum, E. Iodine.

Prop. Crystals small, feebly tenacious; in color and general aspect resemble black lead (*plumbago*): fuses at 338° Fahr.; volatilizes at 347° Fahr., producing a violet-colored vapor. Soluble in æther and alcohol. Water dissolves 1-7000 only of its weight. Gr. xxxix. with gr. ix. of quick lime, and f ℥ iij. of water, when heated short of 212°, form yellowish or brownish solution; when the solution is colorless, the iodine is impure.

Oper. Stimulant, absorbent, emmenagogue,* alterative.

Use. In bronchocele and other glandular swellings, not of scirrhous nature, scrofula, dropsy, cutaneous diseases, secondary syphilis, rheumatism, gout, hepatitis; to bring on menstruation in young females in whom it has not occurred; to assist the cicatrization of venereal ulcers.

Dose. From gr. 1-6 to gr. iv., made into pills, with crumbs of bread.

Off. Prep. *Tinct. Iodinii*, U. S.—L. E. D. *Ung. Iodinii*, U. S.—L. E. D.

IODURETUM AMYLI. Iodide of Starch. (℞ *Iodine* gr. xxiv., *Starch* in fine powder ℥ j. Triturate the iodide with a little water, and gradually add the starch, continuing the trituration till the compound assumes a uniform blue color. Then dry the iodide with a heat so gentle as not to drive off the iodine, and keep in a well-stopped bottle.)

Oper. and *Use.* The same as the other preparations of iodine.

Dose. From gr. x. to gr. xx. three times a day.

IODURETUM SULPHURIS. Ioduret of Sulphur. (Mix 125 parts of iodine with 16 of sulphur, and then gently heat the mixture over a slow fire, or spirit-lamp, until they fuse into one mass.)

Oper. Alterative.

Use. In tinea capitis, and other cutaneous diseases, in the form of an ointment, in the proportion of from gr. x. to ℈ j. of the *iodide* to ℥ j. of lard.

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* I have ascertained that it passes through the kidneys unaltered.—T.

ODIDUM QUININÆ. Ioduret of Quinine (Precipitate sulphate of quinine by means of hydriodate of potassa.)

Prop. A yellow precipitate, soluble in alcohol, and crystallizes in quadrangular prisms.

Use. For scrofulous tumors, and where iodine and tonics are indicated.

IPECACUANHÆ RADIX. U. S.—L. E. D. Ipecacuan Root. (Cephælis *Ipecacuanha. Pentand. Monogynia.* N. O. *Cinchonaceæ.*) Brazils.

Prop. Odor faint and peculiar; taste bitter, subacrid, mucilaginous; in small annulated pieces; externally brown, internally whitish; both water and alcohol extract its virtues, which have been found to depend on a peculiar principle, named *emetia.*

Oper. Emetic in large doses; sudorific, expectorant, in smaller.

Use. To produce vomiting in the commencement of fevers, phthisis, inflammatory diseases, buboes, swelled testicles, and before the paroxysms of ague; to excite nausea in dysentery, asthma, pertussis, hæmorrhages, pneumonia, and, combined with opium, to produce diaphoresis in rheumatism, gout, and febrile disorders.

Dose. For the first intention, gr. xx. to gr. xxx. alone, or united with tartar emetic gr. j.; for the second, gr. j. to gr. iij.; and the third, gr. ij. to gr. vj., with opium gr. j.

Incomp. Vegetable acids, astringent vegetable infusions.

Off. Prep. Pulvis Ipecacuanhæ Compositus, U. S.—L. E. D. *Pilulæ Ipecacuanhæ Comp.,* L. *Vinum Ipecacuanhæ,* U. S.—L. E. D.

IRIS FLORENTINA. U. S. The Root. Florentine Orris. (*Triandria, Monogynia.* N. O. *Iridiæ.* South of Europe.)

Comp. Gum, brown extractive, fecula, an acrid, fixed oil, volatile oil, vegetable fibre.

Prop. Peculiar fragrant odor, bitterish, acrid taste

Oper. Cathartic, emetic. diuretic.

Use. In dropsy; but chiefly used for its fragrance in tooth powder, to correct an offensive breath; to keep up a discharge from issues in the form of small round balls.

IRIS VERSICOLOR. U. S. (*Secondary.*) Blue Flag. The Root.

Prop. Recent root, without odor; nauseous, acrid taste—impaired by age.

Oper. Cathartic, emetic, diuretic.

Use. But seldom employed, owing to the distressing nausea and prostration it occasions.

Dose. Dried root, gr. x. to gr. xx.

JALAPA. U. S.—L. E. Convolvuli Jalapæ Radix, D. (Ipomæa Jalapa. *Pentandria, Monogyn.* N. O. *Convolvulaceæ* ♄.) *Jalapium. Radix.*

Prop. Odor slightly nauseous; taste sweetish, slightly pungent; solid, hard, heavy brittle; fracture resinous; internally light grey, externally covered with a deep-brown, wrinkled bark. Proof spirit is its proper menstruum.

Oper. Cathartic; the resinous part gripes violently.

Use. In costiveness, mania, worms, and as hydragogue in dropsy. It is also a good adjunct to quicken the operation of the chloride of mercury, and other purgatives of slow operation. A drop of essential oil prevents its griping.

Dose. Gr. x. to ʒss. in pills or a bolus.

Off. Prep. *Pulvis Jalapæ Comp.*, U. S.—L. E. D. *Extractum Jalapæ*, U. S.—L. E. D. *Tinct. Jalapæ*, U. S.—L. E. D. *Tinct. Sennæ Comp.*, U. S.—E.

JUGLANS. U. S. Butternut. The inner bark of the root (*J. Cinerea. Monœcia, Polyandria.* N. O. *Juglandria. Indigenous.*)

Prop. Inner bark has a fibrous texture; feeble odor, peculiar, bitter, somewhat acrid taste; virtues all extracted by boiling water.

Oper. Cathartic; operating without pain or irritation, resembling rhubarb.

Use. In habitual costiveness; fevers, combined with calomel; hepatic diseases, with dandelion.

Dose. Gr. xx. to gr. xxx. as a purge, gr. v. laxative.

JUNIPERI OLEUM. E. See *Oleum Juniperi.*

JUNIPERUS. U. S. Juniperi Fructus et Cacumina, L. E. D. Juniperi Cacumina, E. Juniper Fruit and Tops. (*Diœcia, Monadelphia.* N. O. *Coniferæ.* North of Europe. ♄.)

Prop. Odor strong, but not unpleasant; taste warm, pungent, sweetish, followed by a bitter; depending on an essential oil and sweet mucilage. They yield their active properties to both water and alcohol.

Oper. Diuretic, carminative, diaphoretic?

Use. In dropsies; but they cannot be depended on alone, although they are an admirable adjunct to digitalis and squill.

Dose. ℈j to ʒss. triturated with sugar, three or four times a day. The best form of exhibiting the fruit is an infusion made with ℥iij. bruised, and boiling water Oj.

Off. Prep. *Oleum Juniperi*, U. S.—L. E. D. *Spiritus Juniperi Compositus*, U. S.—L. E. D.

JUNIPERUS VIRGINIANA. U. S. (*Secondary.*) *Red Cedar.* U. States. *Coniferæ.* ♄.

Prop. Tops and leaves officinal. Odor peculiar; strong, bitter, pungent taste; properties reside in an essential oil, and readily imparted to alcohol.

Comp. Volatile oil, gum, tannic acid, albumen, bitter extractive, resin, clorophylle, fixed oil, lime, lignin.

Oper. Stimulant, emmenagogue, diuretic, diaphoretic.

Use. In amenorrhœa, chronic rheumatism, dropsy; externally, as an irritant ointment, made by boiling the fresh leaves in twice their weight of lard, and adding a little wax: or the dried leaves may be mixed with six times their weight of resin cerate. Applied to blistered surfaces to keep up a purulent discharge: inferior to the savine.

KINO. U. S.—L. E. D. Pterocarpus Erinacea. (The Edinburgh College considers it Eucalyptus Resinifera; the Dublin, Butea Frondosa. Africa.) *Kino Recina.*

Comp. Tannic and gallic acid, oxide of iron, coloring matter.

Prop. Inodorous; taste sweetish, bitter; sometimes gritty between the teeth; in fragments of a dark ruby-red color; easily pulverized, powder reddish brown; more soluble in warm than in cold water.

Oper. Astringent.

Use. In obstinate chronic diarrhœas; uterine, intestinal, and pulmonary hæmorrhages; fluor albus.

Dose. Gr. x. to gr. xx. in powder; or in solution of the powder ℨj., mucilage of gum f℥j., cinnamon water f℥v.; two tablespoonfuls occasionally. Vide *Tinct.*

Incomp. The mineral acids, alkalies, and their carbonates; acetates of lead, nitrate of silver, tartar emetic, sulphate of iron, bichloride of mercury.

Of. Prep. *Tinctura Kino*, U. S.—L. E. D. *Electuarium Catechu*, E. D.

KRAMERIA. U. S.—L. E. D. Rhatany Root. (Krameria Triandra. *Tetrand. Monogynia.* N. O. *Krameraceæ.* Java. ♄.)

Prop. Taste bitter; communicates a deep-red color both to water and to spirit.

Oper. Astringent, diuretic, detergent.

Use. In dysentery, attended with bloody stools; in ulceration of the gums, and as a stomachic in dyspepsia.

Dose. ℈ss. to ℨj. in powder.

LACMUS. L. E. See *Rocella Tinctoria.*

LACTŬCARIUM. U. S.—L. E. Lactucæ Sativæ Herba; Lactucarium. D. Garden Lettuce and its inspissated juice. (Lactuca Sativa *Syngenesia Æqualis.* N. O. *Cichoraceæ.* Europe. ♂.)

Prop. The herb has no odor; its taste is slightly bitter, when not blanched. Odor and color of the lactucarium the same as that of opium; soluble in water; contains resin, extractive, mucilage, bitter principle; no morphia.

Oper. Narcotic, diaphoretic.

Use. In coughs, phthisis pulmonalis, and all painful affections.

Dose. Of the lactucarium, from gr. ij. to gr. vj.

LACTUCA SATIVA. U. S.—L. E. Garden Lettuce. (*Syng. Æq.* N. O. *Cichoraceæ.* ♂.)

Prop. The inspissated juice, called *Lactucarium*, is chiefly employed. This is in small, irregular lumps, of a reddish-brown color, and of a narcotic odor and bitter taste; resembles opium in color, taste, and smell. Sometimes called *lettuce* opium.

Comp. A bitter, crystallizable principle, *lactucin;* mannite, asparamide, a free acid, a brown coloring substance, resin, cerin, myricin, albumen, gum, nitrate of potassa, chloride of potassium, phosphates of lime and magnesia.

Oper. Anodyne, sedative, narcotic; similar to opium.

Dose. Gr. v. to gr. xx. An uncertain medicine.

LACTŬCA VIRŌSA FOLIA. D. The Leaves of Strong-scented Lettuce. (*Syngenesia Æqualis.* N. O. *Cichoraceæ.* Indigenous. ♂.)

Prop. Odor strong, narcotic, like opium; taste bitter

Oper. Narcotic, diuretic, diaphoretic, gently laxative.

Use. In dropsies, from visceral obstructions: the leaves are seldom used, but an extract is made from them.

Dose. See *Succus Spissatus.* (The *Lactuca Elongata* has been introduced into the U. S. Phar. as a substitute for the *L. Virosa.* It is narcotic, and acts upon the skin and kidneys. From gr. v to gr. xv. of the extract is a dose.)

LAVANDULA. U. S.—L. E. Lavandulæ Spicæ Flores, D

Lavender Flowers. (*Didynamia Gymnospermia.* N. O. *Labiatæ.* South of Europe. ♄.)

Prop. Odor fragrant, agreeable; taste warm, bitterish; depending on an essential oil, which is taken up by alcohol.

Oper. Stimulant, slightly errhine.

Use. When the oil is extracted and united with proof spirit, it is very useful in faintings, paralysis, and as an adjunct to stomachic bitters. The dried leaves were used, formerly, to produce a discharge from the mucous membrane of the nose, but are now neglected

Off. Prep. *Oleum Lavandulæ,* U. S.—L. E. D. *Spir. Lavandulæ,* U. S.—L. E. D. *Tinct. Lavandulæ Comp.,* L. E. D. *Pulv. Asari Comp.,* D.

LAURI BACCÆ ET FOLIA. L. D. Bay Berries, Leaves, and Oil. (For Class and Order, see *Cinnamomi Cort.* Italy. ♄.)

Prop. Odor slightly fragrant; taste pungent, aromatic; depending on an essential oil.

Oper. Stimulant, narcotic, carminative.

Use. Seldom used, except as an external application, and generally compounded with other stimulants.

Dose. Gr. x. to ʒss. in powder.

Off. Prep. *Confectio Rutæ,* L.

LAURI CASSIÆ CORTEX; *Flos nondum explicitus,* D. The Bark and unopened Flower Buds, but not of the Laurus Cassia. Cochin China. (For Class and Order, see *Cinnamomi Cortex*)*

Prop. The bark is more mucilaginous than cinnamon; quills thicker and shorter, with a short, smooth fracture; the buds have a brown color, and shape something like a small nail.

Oper. and *Use.* The same as cinnamon

Off. Prep. *Aq. Cassiæ,* E.

LAURO-CERASUS. E. Cherry Laurel. (N. O. Laurineæ. South of Europe. ♄.)

Prop. Contains a volatile oil; the active principle of which is hydrocyanic acid.

Oper. Sedative.

LEONTODON TARAXACUM. U. S. *Herba, Radix.* D. Vide *Taraxacum.*

LICHEN CETRARIA. (Cetraria, U. S.—L.) Lichen Islandicus, E. Cetraria Islandica, D. Liver Wort. (Cetraria *Islandica.* N. O. *Lichenaceæ.* Iceland. ♃.)

Prop. Inodorous; taste bitter, mucilaginous.

Oper. Tonic, demulcent, nutrient.

Use. Vide *Decoct. Cetrariæ.*

Dose. ʒj. to ʒiv. first steeped in water, holding in solution some carbonate of potassa to extract the bitter; and then boiled in milk, chocolate, or cocoa.

Off. Prep. *Decoctum Cetrariæ,* U. S.—L. D.

LIMONES: SUCCUS, BACCÆ, CORTEX: OLEUM. U. S. —L. E. Citri Fructus, Succus, tunica exterior, ejusque Oleum Volatile, D. Lemons: the bark, the juice, and the oil. (Citrus

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* They are the *production of* Laurus Cinnamomum, of Loureiro

Limonum. For Class and Order, see *Aurantii Baccæ*. Asia 4.)

Prop. Odor of the fruit fragrant, depending on the essential oil which gives the rind its warm bitter taste; the juice is sharp, but gratefully acid; spec. grav. 1 0384: it contains citric acid, extract, saccharine mucilage, and water: soon spoils.

Oper. Juice refrigerant, antiseptic: bark and oil excitant.

Use. The juice as a beverage, diluted with water, and sweetened, is useful in febrile and inflammatory complaints, cooling and quenching thirst; alone, or combined with wine, in scorbutus; with camphor mixture, decoction of cinchona, or wine, in putrid sore throats, remittent fevers, diabetes, and lienteria; and with common salt, in dysentery and colics.

Dose. fʒij. or more, two or three times a day; diluted ad libitum.

Off. Prep. *Acidum Citricum*, L. D. *Syrupus Limonis*, U. S. L. E.

LINĬMENTUM ÆRUGĬNIS. L. Oxymel Cupri Subacetatis, D. Liniment of Verdigris. (*Æruginis cont.* ℥j., *Aceti* f℥vij., *Mellis despumati, pond.* ℥xiv. Liquefied, strained; inspissated by boiling.) *Oxymel Æruginis.*

Oper. Detergent, escharotic.

Use. Diluted with water, it is useful as a gargle in venereal ulcerations of the mouth and fauces; but much caution is required that none of it be swallowed, and the mouth should always be well cleansed after using it: to foul ulcers.

LINĬMENTUM AMMONĬÆ. U. S.—L. E. D. Liniment of Ammonia. (*Liquoris Ammoniæ* f℥j., *Olivæ Olei* f℥ij. Shake them together until they mix.) A soap.

Oper. Stimulant, rubefacient diaphoretic.

Use. In cynanche tonsillaris, spread on a piece of flannel, and applied round the throat: when the skin is very irritable, a larger proportion of oil is requisite.

LINĬMENTUM AMMONĬÆ SESQUĬCARBONĀTIS. L. Liniment of Subcarbonate of Ammonia. (*Liquoris Ammoniæ Sesquicarbonatis* f℥j., *Olivæ Olei* f℥iij. Shake them together until they mix.) *Linimentum Ammoniæ.*

Oper. Rubefacient.

Use. The same as the strong liniment; but the oil and water are less perfectly united by the sesquicarbonate, and after a little time they separate. This preparation is superfluous.

LINĬMENTUM ANODYNUM. D. Vide *Linimentum Saponis et Opii.*

LINĬMENTUM CALCIS. U. S.—E. D. Liniment of Lime-Water. (*Olei Lini Usitat.*, *Aquæ Calcis*, *utriusque partes æquales*. Mix.) A soap.

Oper. Cooling, emollient.

Use. To burns and scalds, spread thick upon lint, and applied over the affected parts

LINĬMENTUM CAMPHŌRÆ. U. S.—L. E. Oleum Camphoratum, D. Camphor Liniment. (*Camphoræ* ℥j., *Olivæ Ol.* f℥iv. Dissolve.) ʒj. contains gr. xv. of camphor.

Oper. Stimulant, anodyne.

Use. To glandular swellings, sprains, bruises, and joints affected with chronic rheumatic pains, applied by friction. Mr. Ware recommends this liniment, with the addition of Liq. Potassæ

Sesquicarbonatis ʒ iv., to be applied to the edges of the eyelids, night and morning, in incipient amaurosis.

LĬNĬMENTUM CAMPHŌRÆ COMPOSĬTUM. L. D. Linimentum Ammoniæ Compositum, E. Compound Camphor Liniment. (*Camphoræ* ℥ ijss., [*T. Camphoræ* ℥ ij., E.] *Liq. Ammoniæ* f℥ vijss., [f℥ v., E.] *Spir. Lavandulæ* Oj. *Spiritus Rosmarini* f℥ j., E.)

Oper. Stimulant, anodyne.

Use To sprains, bruises, and chronic rheumatic pains.

Incomp All acids, water.

LĬNĬMENTUM CANTHARIDIS. U. S. *Liniment of Spanish Flies.* (℞ *Spanish Flies* in powder ℥ j., *Oil of Turpentine* Oss. Digest for three hours by means of a water bath, and strain.)

LĬNĬMENTUM HYDRARGY̆RI COMPOSĬTUM. L. Mercurial Liniment. (*Ung. Hydrarg. fort.*, *Adipis Præparatæ*, *sing.* ℥ iv., *Camphoræ* ℥ j., *Spir. Rect.* fʒ j., *Liquoris Ammoniæ* f℥ iv. First rub the camphor with the spirit, then add the ointment and lard, and lastly, gradually, the solution.)

Oper. Stimulant, discutient.

Use. To parts affected with chronic venereal pains, nodes, and tophi; to indolent swellings, and to discuss collections of fluids; ʒ j. rubbed on the affected parts night and morning.

LĬNĬMENTUM OPĬI. L. E. Liniment of Opium. (*Linim. Saponis* f℥ vj., *Opii Tinct.* f℥ ij. Mix.)

Use. To allay pains; and to procure sleep, when opium cannot be taken into the stomach.

LĬNĬMENTUM SAPŌNIS. L. E. D. Linimentum Saponis Camphoratum, U. S. *Opodeldoc.* Compound Soap Liniment. (*Saponis Duri* ℥ iij., *Camphoræ* ℥ j., *Spir. Rosmarini* f℥ xvj.)

Oper. Stimulant, anodyne.

Use. Against local pains, rubbed on the part; with the addition of Tincture of Spanish Flies, and of opium, we have found this liniment of great use in allaying the violent pains of colic, and procuring sleep.

LĬNĬMENTUM SIMPLEX. E. Simple Liniment. (*Olive Oil* 4 parts, *White Wax* 1 part.)

Oper. Emollient.

Use. In rigid joints.

LĬNĬMENTUM TABACI. U. S. Liniment of Tobacco. (*Tabaci concisi* f℥ j., *Adipis* ℔j. Simmer the tobacco in the lard over a gentle fire until it becomes crisp, and strain.)

Oper. Stimulant, narcotic.

Use. In tinea capitis, scabies, hæmorrhoids.

LĬNĬMENTUM TEREBINTHĬNÆ. U. S.—L. D. Linimentum Terebinthinatum, E. Turpentine Liniment. (*Saponis* ℥ ij., *Camphoræ* ℥ j., *Ol. Terebinthinæ* f℥ xvj. Melt the cerate and stir in the oil.)

Oper. Stimulant.

Use. To burns: first used for this purpose by Dr. Kentish, then a surgeon in Newcastle.

LINI OLEUM, SEMĬNA. L. E. —— Semina, Oleum ex seminibus expressum, D. Linseed. Linseed Oil. (Linum *Usitatissimum. Pentand. Pentagynia.* N. O. *Linaceæ.*)

Prop. Seed inodorous, almost tasteless; small, flat, oval, smooth, shining, brown; yielding mucilage to warm water, and oil by *expression.* Mucilage clear, colorless, inodorous, nearly insipid.

Oper. Demulcent. emollient.

Use. The infusion has been already noticed. In substance, the linseed is ground into powder, and used as poultices very advantageously. It is preferable on account of the facility with which it is made, the powder being simply stirred into boiling water. To phlegmons, and parts affected with pain and inflammation; and to gout, the pain of which it has been found to relieve.

Off. Prep. *Oleum Lini*, E. D.

LINI FARINA. E. *Linum*. U. S. Flaxseed. Linseed Meal

Use. For making poultices.

LINUM CATHARTICUM. E. Purging Flax. (*Pent. Pentag*. N. O. *Linaceæ*. Europe.)

Use. As a purgative, but rarely employed.

LIQUOR ALUMINIS COMPOSITUS. L. Compound Solution of Alum. (*Aluminis, Zinci Sulphatis, sing*. ʒ j., *Aq. ferv* Oiij. Dissolve, and strain the solution through paper.) *Aqua Aluminis Composita*.

Oper. Detergent, stimulant.

Use. As a collyrium, properly diluted, in ophthalmia; an injection in gleet, and in fluor albus; and as a lotion for cleansing wounds, and removing cutaneous eruptions.

LIQUOR AMMONIÆ FORTIOR. U. S.—L. See Ammoniæ Liquor Fortior.

LIQUOR AMMONIÆ. U. S.—L. Aqua Ammoniæ, — fortior, E. Aqua Ammoniæ Causticæ, D. Solution of Ammonia. (*Ammoniæ Hydrochloratis* ℥ x., *Calcis* ℥ viij., *Aquæ* Oij.)

Comp. Ammoniacal gas (a compound of 82.36 nitrogen, and 17.64 hydrogen, or 3 eq. hydrogen=3+1 nitrogen=14.15, equiv. =17.50), 10 parts, and water 90 parts, when of a spec. grav. 0.960. The solution of a spec. grav. 0.936, fixed by the Dublin College, contains more ammoniacal gas.

Prop. Odor pungent, strong, peculiar; taste hot, pungent; is colorless, transparent; absorbs rapidly carbonic acid from the atmosphere, so as to require to be kept well corked up.

Oper. Stimulant, antacid, rubefacient.

Use. Largely diluted in asphyxia, acidities of the primæ viæ, and in hysteria; externally it is applied to the nostrils in faintings; a rag moistened with it, and laid over the scrobiculus cordis, sometimes raises an instantaneous blister, and always proves useful in spasms, and gout of the stomach; a liniment composed of camphor ʒ j. dissolved in olive oil f ℥ j. and liq. ammon. f ℥ ij., is an excellent application to parts affected with deep-seated inflammation. (Granville's Lotion.)

Dose. ♏v. to ♏xxx. diluted with water or milk.

Incomp. All the metallic salts; the acids; sulphas aluminis.

Off. Prep. *Hydro-sulphuretum Ammoniæ*, D. *Spir. Ammoniæ*, L. D. *Linimentum Camphoræ Comp*. U. S.—L. E. *Linimentum Ammoniæ*, U. S.—L. E. D. *Spiritus Ammoniæ Succinatus*, L. *Spiritus Ammoniæ Aromaticus*, U. S.—E. *Spiritus Ammoniæ Fœtidus*, E. *Linimentum Hydrargyri*, L.

LIQUOR AMMONIÆ ACETATIS. U. S.—L. Aqua Acetatis Ammoniæ, E. D. Solution of Acetate of Ammonia Spirit of Mindererus. (*Ammoniæ Sesquicarbonatis* ℥ ivss., *Aceti Distillati* Oiv., L.; or add the salt till the acid be saturated.) *Liq. Ammoniæ Acetatæ*.

Comp Acetate of ammonia, water: proportions variable.
Prop. Inodorous; taste neutral, nauseous; colorless.
Oper. Sudorific; externally cooling, astringent.
Use. Diluted, in febrile and inflammatory complaints; as a lotion to inflamed surfaces, sprains, and fractures; diluted with rose-water, a good collyrium; and still more diluted, an injection in the commencement of gonorrhœa.
Dose. fʒij. to fʒxij. every three or four hours.
Incomp. Acids, alkalies, nitras argenti.
Tests. Should not precipitate nitrate of silver nor chloride of barium; nor be colored by hydrosulphuric acid.

LIQUOR AMMONIÆ SESQUICARBONATIS. L. E. Aqua Carbonatis Ammoniæ, D. Solution of Sesquicarbonate of Ammonia. (*Ammoniæ Sesquicarbonatis* ℥iv., *Aquæ Distillatæ* Oj Dissolve, and filter through paper. Spec. grav. 1150.)
Use, &c. The same as the Sesquicarbonate of Ammonia.

LIQUOR ARGENTI NITRATIS. L. Solution of Nitrate of Silver. (*Argenti Nit.* ʒj., *Aq. Dist.* f℥j.
Use. To apply to excoriations in fevers, and cases of long confinement to bed in low conditions of the habit; to the diseased surface in erysipelas.

LIQUOR BARII CHLORIDI. U. S.—L. See Solutio Muriatis Barytæ.

LIQUOR POTASSÆ ARSENITIS. U. S.—L. Liquor Arsenicalis, E. D. Arsenical Solution. (*Arseniosi Acidi in frustula triti, Potassæ Carbonatis, sing.* gr. lxxx., *Aq. Distil.* Oj. Boil them together in a glass vessel until the arsenious acid is dissolved. When the solution is cold, add Spir. Lavand. Comp. fʒv., and as much distilled water as will make up the whole to one pint.)
Comp. Arsenite of potassa dissolved in water: the spirit of lavender gives only color and taste.
Oper. Tonic, antiperiodic.
Use. The same as the arsenious acid; in protracted rheumatism, where there is much debility, and the joints much affected. We have given it with decided advantage in threatened apoplexy, after cupping and purging, when the strength is diminished, and the complexion pale.
Dose. ♏iv. gradually increased to ♏x. twice a day.
Incomp. Mineral acids, hydrosulphuric acid, acidulous salts, hydrosulphates and sulphurets, salts of calcium, lime-water, alum, salts of magnesia; salts of iron, silver, and copper; decoction and tincture of cinchona.

LIQUOR CALCIS. U. S.—L. Aqua Calcis, E. D. Solution of Lime. (*Calcis* ℔ss, *Aquæ Distillatæ* Oxij. Add a little of the water to the lime, and when slaked add the remainder, and shake them together; then cover the vessel, and let it stand three hours; then bottle it, lime and water, in stopped bottles; and when it is to be used, take the clear solution.) *Aqua Calcis.*
Comp. The clear fluid consists of about gr. 11.6 of lime in every Oj. of water at 60° Fahr.
Prop. Inodorous; taste austere, acrid, sweetish; colorless, transparent. Changes vegetable blue colors green. Absorbs carbonic acid, whilst the whole of the lime is rendered insoluble.

Oper. Antacid, anthelmintic; externally detergent.

Use. Diarrhœa, diabetes, fluor albus; dyspepsia, when much acid is in the stomach; in slimy bowels and worms; externally as a lotion to foul and cancerous ulcers; also in tinea capitis and scabies, but with little advantage.

Dose. f℥j. to f℥vj. with milk. When long used in dyspepsia, it should be discontinued at intervals.

Incomp. Acids, alkaline carbonates, tartar emetic, barytes, tartrates and citrates. Infusions of orange-peel, calumba, cinchona, rhubarb, and senna.

Off. Prep. *Oleum Lini cum Calce*, E. D. *Aqua Calcis Composita*, D.

LIQUOR CALCII CHLORIDI. U. S.—L. Calcis Muriatis Solutio, E. Aqua Calcis Muriatis, D. Solution of Chloride of Calcium. (*Chloridi Calcis* ℥iv., [xij., E.] *Aquæ Dist.* f℥xij. Or, take of *Marble* in fragments ℥ix., *Muriatic Acid* Oj., *Distilled Water* a sufficient quantity. Mix the acid with Oss. distilled water, and gradually add the marble. Towards the close of the effervescence, apply a gentle heat; and when the action has ceased, pour off the clear liquor and evaporate to dryness. Dissolve the residuum in its weight and a half of distilled water, and filter the solution.)—*U. S. Phar.*

Use. The same as the chloride.

Dose. ♏xl. to fʒij.

LIQUOR CUPRI AMMONIO-SULPHATIS. L. Aqua Cupri Ammoniati, D. Solution of Ammoniated Copper. (*Cupri Ammonio-Sulphatis* ʒj., *Aquæ Distil.* Oj. Dissolve, and filter the solution through paper.) *Liquor Cupri Ammoniati.*

Oper. Corrosive, detergent.

Use. Externally to foul ulcers; and diluted with an equal part of distilled water, it is applied by means of a hair pencil to specks and films on the eye.

LIQUOR HYDRARGYRI BICHLORIDI. L. Solution of Bichloride of Mercury. (*Hydrarg. Bichloridi*, *Ammoniæ Hydrochloratis*, *sing.* gr. x., *Aq. Distil.* Oj. Dissolve in the water.)

This preparation is superfluous, except that "it facilitates the administration of minute divisions of a grain of this active medicine;" f℥j. contains gr. ½ of the salt.

Dose. ♏xx. to fʒij. in any mucilage; or in syrup and water.

Incomp. Alkalies and their carbonates, lime-water, iodide of potassium, tartar emetic, nitrate of silver, acetates of lead, sulphurets, soaps, infusions and decoctions of astringent vegetables, albumen ovi.

LIQUOR LABARRAQUII CHLORO-SODAICUS. F. Chloro-Sodaic Solution of Labarraque. (Dissolve gr. 2187.5 of pure crystallized carbonate of soda in f℥xx. of distilled water, and saturate the solution with chlorine gas.)

Prop. Color pale yellow, transparent; odor that of chlorine gas, taste pungent; spec. grav. 1.064.

Comp. Chloride of soda 73.53; chlorate of soda 36.46, with an excess of chlorine

Oper. Antiseptic; astringent, tonic.

Use. For disinfecting foul air, destroying animal putrefaction; an excellent lotion for chilblains, fetid ulcers, and gangrenous sores; and the best lotion in ptyalism yet discovered *Internally in dysentery*

Dose. From ♏xx to fʒj. in a cupful of water; for a lotion or a gargle, fʒ xij. in f℥ vj. of distilled water.

LIQUOR MORPHIÆ ACETATIS. Solution of Acetate of Morphia, F. (Take of acetate of morphia gr. xvj., distilled water fʒ vj., dilute acetic acid fʒ ij. Mix.)

Use. The same as that of the solid acetate.

Dose. From ♏vj. to ♏xxxvj. in any bland vehicle

⁂ *The addition of the acid prevents the decomposition of the acetate, which always occurs when the solid acetate is dissolved in water.*

LIQUOR PLUMBI DIACETĀTIS. L. D. Liquor Plumbi Subacetas, U. S. Plumbi Diacetatis Solutio, E. Solution of Diacetate of Lead. (*Plumbi Acetatis* ℔ij. et ℥ iij., *Plumbi Oxydi in pulv. triti* ℔j. et ℥iv, *Aquæ* Ovj. Boil for half an hour, occasionally stirring, and when the solution cools make up the quantity to Ovj.; strain.) *Liquor Acetatis Plumbi.*

Comp. 2 eq. oxide of lead=222.12, acetic acid 1=51 48 equiv. =273.60.

Prop. Colorless; odor acetous; taste austere, astringent, sweetish.

Oper. Externally cooling, astringent, discutient.

Use. Diluted with forty times its quantity of *distilled* water, it is a useful application to phlegmonous inflammations and burns; and still more diluted, it forms a good collyrium, and a wash for the mouth in salivation.

Incomp. Mucilaginous solutions or decoctions; common pump water.

Off. Prep. *Liq. Plumbi Diacetatis Dilutus*, L. D

LIQUOR PLUMBI DIACETĀTIS DILUTUS. L. Liquor Diacetatis Plumbi Compositus, D. Diluted Solution of Diacetate of Lead. (*Liq. Plumbi Diacet.* f℥ jss., *Aquæ Distil.* Oj., *Spiritus Tenuioris* fʒ ij) *Liq. Plumbi Subacetatis Dilutus*, U. S.

The intention of the London and Dublin Colleges, in giving a formula for this mixture, is not very obvious. The proportion of spirit is too small.

LIQUOR POTASSÆ. U. S.—L. Aqua Potassæ, E. Aqua Potassæ Causticæ, D. Solution of Potash. (*Potassæ Carbonatis* ℥ xv., *Calcis* ℥ viij., *Aquæ Dist. Ferv. congium.* Dissolve the alkali in cong. ss. of the water, sprinkle a little water on the lime to slake it, and add the rest of the water. Mix the whole: set the mixture aside in a close vessel, and when it is cold, decant, and keep the decanted fluid in well-stopped phials of green glass.

Comp. Oxide of potassium and water.

Prop. Inodorous; taste caustic, alkalescent; colorless; appearance oily when shaken; more dense than water; feels soapy between the fingers, owing to the solution of the cuticle; will not effervesce with acids; spec. grav. according to the Dublin formula 1.100; U. S. 1.056.

Oper. Lithontriptic in some cases; antacid; diuretic; externally escharotic, stimulant.

Use. The reputation of alkalies in calculus is not so high as formerly; potassa acts on uric calculi, and therefore may be useful in nephritic calculus; but its chief use is in preventing the formation of uric acid It neutralizes acids in the stomach and allays irritability of that organ; it is useful in lepra an psoriasis, and some other cutaneous complaints. Externally, diluted, as a lotion in rachitis and gouty swellings.

Dose. ♏x. to f ʒ j. in chicken-broth or beer, three or four times a day. When used to counteract acidity, a bitter should be united to it.

Incomp. Acids, metallic salts, sesquicarbonate, acetate, and hydrochlorate of ammonia, chloride and bichloride of mercury.

LIQUOR POTASSÆ CARBONATIS. U. S.—L. Aqua Potassæ Carbonatis, D. Solution of Carbonate of Potassa. (*Potassæ Carbonatis*, ℥xx., *Aquæ Distillatæ* 0j. Dissolve and strain.)

Oper. Antacid, diuretic.

Use. In acidity of the stomach; most advantageous when united with myrrh. (℞ *Pulv. Myrrhæ* ℥j., *Liq. Potassæ Carbonatis* f℥iv. Infuse for four days, filter through paper, and give it in the same doses as the liquor.)

Dose. ♏x. to f ʒ j. in any bitter infusion.

LIQUOR POTASSÆ CITRATIS. U. S. *Neutral Mixture.* (℞ *Fresh Lemon Juice* 0ss., *Carbonate Potassæ* q. s.; *saturate.*)

LIQUOR POTASSÆ EFFERVESCENS. L. E. Effervescing Solution of Potassa. (*Potassæ Bicarbonatis* ʒj., *Aquæ Distil.* 0j. Pass through the solution a stream of carbonic acid under pressure. Preserve in well-stoppered bottles.)

Use. As an agreeable antacid.

LIQUOR POTASSII IODIDI COMPOSITUS. L. Liquor Iodini Compositus, U. S. Compound Solution of Iodide of Potassium. (Iodide of potassium *ten grains*, iodine *five grains*, distilled water *one pint*. Mix and dissolve. Or, ℞ *Iodine* ℥vj., *Iodide of Potassium* ℥jss., *Distilled Water* 0j. Dissolve.)—*U. S. Phar.*

Prop. Brown color; smell, taste, and reaction upon starch, the same as iodine.

Use. In scrofulous affections, bronchocele, and secondary syphilis.

Dose. From f ʒ ij. to f ʒ vj.

LIQUOR SODÆ CHLORINATÆ. U. S.—L. Solution of Chlorinated Soda. (*Sodæ Carbonatis* ℔j., *Aq. Dist.* f℥xlviij., *Sodii Chloridi* ℥iv., *Manganesii Binoxydi* ℥iij., *Acidi Sulph.* ℥iv. Dissolve the carbonate of soda in 0j. of water, then put the chloride of sodium and the binoxide of manganese in powder into a retort, and add the sulphuric acid diluted with f℥iij. of water when cold. Apply heat, and transmit the chlorine through the solution of carbonate of soda.)

Prop. A pale yellow color; taste sharp, brackish; evolves chlorine when exposed to the air.

Oper. Astringent, antiseptic.

Use. In typhus, in other low fevers, largely diluted; to destroy fœtor, and tendency to putrefaction in the bowels. A disinfecting agent.

LIQUOR SODÆ EFFERVESCENS. L. Effervescing Solution of Soda. (*Sodæ Sesquicarbonatis* ʒj., *Aquæ Dist.* 0j. Pass a stream of carbonic acid through it under a high pressure. Preserve the solution in well-corked bottles.)

Use. A useful saline draught when taken with a spoonful of lemon juice; and as soda-water.

LIQUOR TARAXACI (Take of dandelion roots, clean, dried and sliced, ℥ xviij.; infuse for twenty-four hours in cold distilled water to cover them; press and set aside, that the fecula may subside; decant, and heat the clear liquor to 180° Fahr., so as to coagulate the albumen; filter while hot, and evaporate in a dry room, or by means of a current of warm air, until the product shall weigh ℥ xiv.; to this add ℥ iv. of rectified spirit.)—*Annals of Chemistry.*

Dose. f ʒ j. to f ʒ iij.

LIQUOR TARTARI EMETICI. D. Solution of Emetic Tartar. (*Antimonii Potassæ Tartratis* ℈ j., *Aquæ Distillatæ ferventis* mensura ℥ viij., *Spir. Vini Rectificati* mensura ℥ ij. Dissolve the tartrate of antimony and potassa in water, filter the solution, and add the spirit.)

Oper. Emetic, sudorific.

Use. In the febrile affections of infancy and youth; in hooping-cough, and whenever it is necessary to clear the stomach, or determine to the skin.

Dose. As an emetic, from f ʒ ss. to f ʒ iij., every five or ten minutes until it operates; as a diaphoretic, from ♏ vj. to f ʒ j. every three or four hours.

Incomp. Alkalies, astringent vegetable solutions, cinchona.

LIRIODENDRON. U. S. Tulip-Tree Bark. L. Tulipifera. (*Polyan. Polygynia.* N. O. *Magnoliaceæ.* Indigenous.)

Comp. Contains resin, gum, fecula, and mucus.

Prop. Odor of the fresh bark, heavy and rather disagreeable; taste bitter, pungent, and aromatic; peculiar properties owing to a volatile principle called by Prof. Emmet, its discoverer, *liriodendrin*, which is solid, white, crystallizable, insoluble in water, holds a place between resins and essential oils.

Oper. Tonic, diaphoretic, stimulant.

Use. In intermittents, chronic rheumatism, dyspepsia.

Dose. Of the powder, from ʒ ss. to ʒ ij. Infusion, f ℥ j. to f ℥ ij.

LITHARGYRUM. E. Litharge. See *Plumbi Oxydum.*

LITMUS. D. Litmus or Archil. (Lichen Roccella. *Cryptogamia.* N. O. *Lichenaceæ.* Azores. ♃.)

Prop. Inodorous; taste saltish; and, when chewed, subacrid.

Use. Color blue or violet. As a test of great delicacy for acids. To prepare it, the plant is reduced to powder; some of the soda of commerce is then added to it; and it is repeatedly moistened with urine till it ferments, and gradually acquires a violet color; it is then dried. The watery infusion of it, or paper stained with it, shows the presence of an otherwise imperceptible portion of acid in any fluid.

LOBELIA. U. S.—L. E. Indian Tobacco. (Lobelia *inflata. Pentandria, Monogyn.* N. O. *Lobeliaceæ.* United States of America. ♃.)

Prop. Odor slight; taste acrid: yields its properties to water, alcohol, and æther.

Oper. Emetic, purgative, expectorant, antispasmodic.

Use. In the paroxysm of asthma; in croup, hooping-cough.

Dose. In powder, gr. iv. to gr. xx.; infusion, f ℥ j.; tincture ♏ xv to ♏ xxx.

LUPULUS. L. E. Hops. (Humulus Lupulus, U. S. *Diœcia Pentandria.* N. O. *Urticaceæ.* Europe ♃.)

Prop. Odor fragrant, sub-narcotic; taste bitter, aromatic; depending on a peculiar principle named *lupuline*, extractive, and essential oil; extracted equally by water and spirit, from the dried catkins.

Oper. Narcotic, anodyne, diuretic.

Use. In gout and rheumatism; under the form of infusion in the proportion of ℥ss. to Oj. of boiling water; but the extract already noticed is preferable. The powder, formed into an ointment with lard, is said to ease the pain of open cancer. A pillow, stuffed with hops, is an old mode of procuring sleep in the watchfulness of delirious fever. Its powers have been overrated.

Dose. Gr. iij. to ℈j. united with ℥ss. of cinnamon water, twice or thrice a day; of the infusion, ℥jss.

Off. Prep. *Ext. Lupuli*, L. *Tinct. Lupuli*, L. *Tinct. Humuli*, U. S.

LYCOPUS. U. S. (*Secondary.*) *L. Virginicus*. Bugle Weed. The Herb. (*Diand. Monogyn.* N. O. *Labiatæ*. Indigenous.)

Prop. Odor peculiar, nauseous, slightly bitter taste.

Oper. Narcotic, tonic, diaphoretic.

Use. In affections of the lungs, quiets irritation, allays cough, diminishes the pulse.

Dose. Of the infusion, ad libitum.

LYTHRUM SALICARIA. HERBA. D. Salicaria. Loose strife. (*Dodecand. Monogyn.* N. O. *Calycanthemæ*. Europe ♃.)

Prop. Inodorous; taste herbaceous, subastringent.

Oper. Astringent, tonic.

Use. In diarrhœa and chronic dysentery.

Dose. f℥iij. of a decoction, made by boiling ℥j. of the herb in Oj. of water down to Oss., twice or thrice a day.

MAGNES. Magnet.

Oper. The artificial magnet has been employed for the last century in the treatment of disease. It acts on the nervous system, modifying nervous action and sensibility, and sometimes, in impressible subjects, through the imagination. The natural loadstone has long been employed as a remedial agent in many parts of the East.

Use. In nervous and spasmodic affections; such as spasms, palpitations, convulsions, asthma, epilepsy, angina pectoris, tremors, cramps, neuralgia, rheumatism, gout, toothache, and all local diseases attended with pain and increased action. The magnet is either applied directly over the diseased part, or around it, by gentle friction, and continued according to circum stances. If a natural magnet of considerable size, it may be laid on the part; or a magnetic current may be established through the diseased parts by means of two or more magnetized plates. The application of a small blister under one of the plates renders the application more effectual.

MAGNESIA. U. S.—L. E. Magnesia Usta, D. Magnesia. (Obtained from Carbonate of Magnesia, by exposure to a strong heat.) *Magnesia Usta*.

Comp. A metallic base, named by Sir H. Davy magnesium, 60, and oxygen 40 in 100 parts; or 1 eq. magnesium=12.7+1 oxygen=8, equiv.=20.7.

Prop. Inodorous; taste very slightly bitter; in the form of a powder, white, light, spongy, soft; spec. grav. 2.3, requiring 5142 times its weight of water at 60°, and 36,000 at 212° for its solution. Fifty grains should wholly dissolve without effervescence in ℥j. of hydrochloric acid; and the solution should not afford a precipitate either to ammonia or oxalate of ammonia.

Oper. Antacid; laxative, when it meets with acids in the stomach.

Use. In heartburn, aphthæ, and other acidities; preferable to chalk when the bowels are costive. Sometimes it is given in dysentery, combined with ipecacuanha and opium, and followed by successive draughts of lemonade.

Dose. Gr. x. to ʒj. occasionally in water or milk.

Incomp. Acids, metallic salts, hydrochlorate of ammonia.

MAGNESIÆ CARBŌNAS. U. S.—L. E. D. (Prepared from Sulphate of Magnesia by Carbonate of Soda.) *Magnesia Alba.*

Comp. Carbonic acid 40, magnesia 43, water 17 parts in 100.—(*Dalton.*) Or, 1 eq. magnesia=20.7+1 carbonic acid=22.12, equiv.=42.82.

Prop. Inodorous, insipid; light, white, spongy, opaque; effervescing with acids; nearly insoluble in water; spec. grav. 0.2941.

Oper. Antacid; laxative, when it meets with acid.

Use. The same as that of magnesia; but owing to the carbonic acid, it sometimes occasions unpleasant distension.

Dose. fʒss. to ʒij. in water.

Off. Prep. *Magnesia*, L. E. D. *Hydrargyrum cum Magnesia*, D.

MAGNESIÆ SULPHAS. U. S.—L. E. D. Sulphate of Magnesia. (Obtained from sea water: magnesian lime-stone.) *Magnesia Vitriolata.*

Comp. Sulphuric acid 29.35, magnesia 17, water of crystallization 53.65 parts in 100.—(*Bergman.*) Or, 1 eq magnesia=20.7+1 sulphuric acid=40.1, equiv.=60.8.

Prop. Taste bitter, disagreeable; in four-sided, acicular crystals, which occasionally, owing to an admixture of hydrochlorate of magnesia, deliquesce; the pure sulphate effloresces; spec. grav. 1.66; soluble in an equal part of water at 60°, increasing the volume of the water four-tenths. Ten grains in f℥j. of water, and treated with carbonate of ammonia, should not be wholly precipitated by ♏200 of a solution of phosphate of soda.

Oper. Purgative, diuretic.

Use. In all cases which require purgatives. It operates without griping, and, when united with infusion of roses acidulated, will sit on the stomach when all other things are rejected. The less it is diluted, if a draught of warm water be taken an hour afterwards, the better and more easily it operates. An adjunct to clysters.

Dose. ℥ss. to ℥j. In clysters ℥jss. to ℥iij.

Incomp. The fixed alkalies and their carbonates, lime-water, chloride of barium, nitrate of silver, acetates of lead.

MAGNOLIA. U. S.—M. *Glauca.* (*Secondary.*) Magnolia. The Bark. (*Polyandria, Polygynia.* N. O. *Magnoliaceæ. Indigenous.*)

Prop. There are several species of Magnolia, all of which possess nearly the same medicinal properties. Odor aromatic; taste bitter, spicy, aromatic.

Oper. A gently stimulating aromatic tonic, and diaphoretic.

[illegible] gastric debility. [illegible] often repeated. The [illegible]

[illegible] Succus Con [illegible] sponta [illegible] mucilage [illegible] bitter- [illegible] color, [illegible]

[illegible] account [illegible] ct to [illegible]

[illegible] cream, [illegible] principle, not [illegible] also found [illegible] fermentation. [illegible] filter, and suffer [illegible] small, beautiful, [illegible] consists chiefly of mannite, [illegible] of it [illegible] consists of 40.028 of carbon, [illegible]

[illegible] five parts of cold water, and [illegible] boiling water; entirely insoluble [illegible] what soluble in boiling alcohol [illegible] colorless, adhesive fluid, and [illegible] more strongly heated, it burns, [illegible] sugar: taste sweet, but feebly so; in- [illegible]

[illegible] the nauseous flavor of manna.

[illegible] are indicated.

[illegible] children, ℈ij. may be dissolved in ℥iv. [illegible] aromatic water, and a teaspoonful given every [illegible]

[illegible]NESII BINOXYDUM. L. D. Manganesii Oxydum [illegible] or Black Oxide of Manganese. (A peroxide.)

[illegible] manganesium a peculiar metal; 60+oxygen 40, in 100 [illegible] 1 eq. manganesium =27.7+2 oxygen=16, equiv.= [illegible]

[illegible] black masses; becomes grey when exposed [illegible] heat, and affords abundance of oxygen gas.

Use. In pharmaceutical operations; for procuring oxygen gas; and for fumigation in cases of infection. (℞ *Sodii Chloridi* ℥ iv., *Manganesii Binoxydi* ℥ j., *Acidi Sulphurici* f℥ ij., *Aquæ* f℥ ij. Mix the acid and water, and pour the mixture over the other ingredients, in a china basin, placed in a pipkin of hot sand.) The doors and windows of the room under fumigation must be closely shut for an hour or two; then thrown open, and a current of air allowed to pass through the room.

MARMOR. U. S.—L. E. D. Marble. *Carbonas Calcis dura.*

Prop. Color various shades of white; internal lustre vitreous fracture foliated; brittle; spec. grav. from 2.7 to 2.84. It has scarcely any taste, and is composed of 43.14 of carbonic acid and 56.86 of lime.

MARANTA. U. S.—L. E. Arrowroot. (Maranta *arundinacea* *Monandria, Monogynia.* N. O. *Marantaceæ.*) West Indies

The fecula of the rhizomes: when boiled with water or milk, it forms a mild, nutritious article of food, well adapted for infants and convalescents: a tablespoonful to Oj. of water.

MARRUBIUM. U. S.—L. (*Secondary.*) Marrubium Vulgare D White Horehound. (*Didynam. Gymnosperm.* N. O *Labiatæ.* Europe. ♃.)

Prop. Odor strong, not unpleasant; taste bitter.

Oper. Tonic, diuretic, laxative; emmenagogue?

Use. In hysteria, chronic catarrh, and pituitous asthma; obstruction of the catamenia; seldom used.

Dose. In powder, ʒ ss. to ʒ j.; of the expressed juice, f℥ ss to f℥ jss.; or of this infusion (*Marrub. Fol.* ℥ ss., *Aquæ Ferv.* Oj.) a large glassful twice or thrice a day.

MASTICHE. L. E. D. Mastic. (*Diœcia, Pentandria.* N. O. *Terebinthaceæ.* Spain, Chios. ♄.)

Comp. Resin, essential oil, and a matter resembling caoutchouc

Prop. Odor agreeable when heated; almost insipid; in globular, irregular, yellowish, semi-transparent masses; soluble in æther partially in alcohol.

Oper. Stimulant, sialogogue?

Use. In old obstinate coughs; gleet; and chewed in paralysis of the tongue.

Dose. Gr. x. to ʒ ss. twice a day.

MATRICARIA CHAMOMILLA. *Russian P.* (N. O. *Asteraceæ.*)

Comp. Volatile oil, bitter extractive.

Oper. Stimulant, diaphoretic, antispasmodic.

Dose. In powder, ℈j. to ʒ ij.

MEL. U. S.—L. E. D. Honey. (Collected from flowers by the *Apis Mellifica.*)

Comp. Saccharine matter, mucilage; some acid, occasionally essential oil; varying according to the kinds of plants used by the bee

Prop. Odor peculiar; taste sweet, and slightly acrid; the best is limpid, containing small concretions; nearly colorless; and tenacious.

Oper. Aperient, externally detergent; stimulant.

Use. Seldom used internally as a medicine: but when freely eaten it is apt to produce colic; externally as an adjunct to gargles in cynanche tonsillaris; in aphthæ; sometimes applied to foul ulcers.

Off. Prep. Mel Despumatum, U. S.—D. *Mel Boracis*, L. E. *Mel Rosæ*, U. S.—L. E.

MEL DESPUMATUM. U. S.—D. Clarified Honey. (Melt the honey in a water bath; then take off the scum.)

Prop. Limpid; so consistent that, when divided with the edge of the spoon, it does not again instantly unite; specific gravity 1.31.

Use. The same as that of honey; for pharmaceutical purposes.

Off. Prep. Mel Boracis, L. *Mel Rosæ*, U. S.—L. D. *Oxymel*, L. D. *Oxymel Æruginis*, D. *Oxymel Colchici*, D. *Oxymel Scillæ*, U. S.—L. D.

MEL BORACIS. L. E. D. Honey of Borax. (*Boracis contriti* ʒj., *Mellis Despumati* ℥j. Mix.)

Oper. Detergent.

Use. Applied to the tongue, and insides of the cheeks, in aphthous affections, and in ptyalism.

MEL DESPUMATUM. U. S. Prepared Honey. (Take of *Clarified Honey* Oss., *Diluted Alcohol* Oj., *Prepared Chalk* ℥ss. Having mixed the honey and diluted alcohol, add the prepared chalk, and allow the mixture to stand for two hours, occasionally stirring it. Then heat it to ebullition, filter, and by means of a water bath evaporate the clear liquor, so that when cold it may have the specific gravity 1.32.)—*U. S. Phar.*

MEL ROSÆ. U. S.—L. E. D. Rose Honey. (*Rosæ Gallicæ Exsiccat.* ℥ij., *Aquæ Ferv.* Oss., *Mellis Despum.* Oij. Infuse the roses six hours; add the strained liquor to the honey, and evaporate to a proper consistence in a water bath.)

Prop. Odor that of the rose; taste sweet, astringent; color red · limpid, tenacious.

Oper. Astringent, detergent.

Use. Chiefly in gargles, in ulceration, and inflammation of the mouth and fauces (℞ *Mellis Rosæ* ℥j., *Acidi Hydrochlorici* ♏xxx., *Aquæ* f℥vj.); forms a good detergent in aphtha gangrenosa; as a vehicle for other remedies in infantine diseases.

MELISSA. U. S.—E. D. (*Secondary.*) Balm. *Didynam. Gymnospermia.* N. O. *Labiatæ.* Alps. ♃.) *Melissæ folia.*

Prop. Odor pleasant, something like that of a lemon; taste austere, aromatic.

Oper. Stomachic, diuretic.

Use. Made into tea, it is used as a diluent in febrile diseases; seldom used in substance.

Dose. Of the powder, gr. x. to ℈ij.

MENTHA PIPERITA. U. S.—L. E. D. Peppermint. (*Didynamia, Gymnospermia.* N. O. *Labiatæ.* Indigenous ♃.) *Mentha Piperitis.*

Prop. Odor strong, agreeable; taste pungent, aromatic, and producing a sensation of coldness in the mouth; depending on a volatile oil and camphor.

Oper. Stomachic, carminative.

Use. Vide under Aqua et Ol. Menthæ Piperitæ.

Dose. Gr. x. to ʒj.; scarcely ever in substance.

Off. Prep. Aqua Menthæ Piperitæ, U. S.—L. E. D. *Oleum Menthæ Piperitæ*, U. S.—L. E. D. *Spir. Menthæ Piperitæ*, U. S.—L. E.

MENTHÆ PIPERITÆ OLEUM. U. S.—E. See Oleum *Menthæ Piperitæ.*

MENTHA VIRIDIS U. S.—L. E. D. Spearmint. (*Class and Order as above.*) *Mentha Sativa.*

Prop. Odor strong, aromatic; taste warm, austere, bitterish.

Oper. Stomachic, carminative.

Use. Vide under Aqua et Ol. Menthæ Viridis. An infusion of it is a good diluent in febrile diseases.

Dose. Gr. x. to ʒj.; scarcely ever used in substance.

Off. Prep. *Aqua Menthæ Viridis*, U. S.—L. E. D. *Ol. Menthæ Viridis*, U. S.—L. E. D. *Spir. Menthæ Vir.*, L. E. *Infusum Menthæ Compositum*, D.

MENTHA PULEGIUM. L. E. Hedeoma Pulegeoides, U. S. Pulegii Herba, D. Pennyroyal. (*For Class and Order, see Mentha Piperita.*) Indigenous. ♃.)

Prop. Odor aromatic; taste warm, pungent; not unlike that of spearmint.

Oper. Expectorant, diaphoretic.

Use. In asthma and pertussis, but of little value; seldom used.

Dose. Gr. x. to ʒj.

Off. Prep. *Aqua Pulegii*, L. E. D. *Oleum Pulegii*, U. S.—L. D. *Oleum Hedeoma*, U. S. *Spiritus Pulegii*, L.

MENYANTHES. U. S.—L. E. D. Buck Bean. (*Pentandria, Monogynia.* N. O. *Gentianaceæ.* Europe. United States. ♃) *Trifolium Paludosum.*

Prop. Inodorous; taste intensely bitter; water extracts its properties.

Oper. Tonic, diuretic, purgative; in large doses emetic.

Use. In intermittents, arthritic and chronic rheumatic affections, and in cachectic and herpetic diseases.

Dose. ℈j. to ʒj. of the dried leaves powdered; f℥j. to f℥jss. of this infusion. (*Menyanth. fol. sic.* ℥ss., *Aquæ* Oss.)

MEZEREUM. U. S.—L. Mezereon, E Daphnes Mezerei Cortex, D. Mezereon Bark. (*Octandria, Monogynia.* N. O. *Thymalaceæ.* North of Europe. ♄.)

Comp. Daphnina, oleo-resin, wax, extractive, gum, sugar, malates.

Prop. Inodorous; taste, when chewed for some time, acrid, burning; yields its virtues to water and vinegar.

Oper. Stimulant, diaphoretic; in large doses emetic.

Use. In venereal diseases, but its efficacy is doubtful. It is sometimes useful in the sequelæ of syphilis; in chronic rheumatism, lepra and scrofulous swellings; and chewing frequently thin slices of the recent root has been found useful in palsy of the tongue; externally, the fresh bark soaked in vinegar is useful for keeping open issues.

Dose. Of the powder, gr. j. gradually increased to gr. x. *Vide Decoctions.*

Off. Prep. *Decoctum Mezerei*, E. *Decoct. Sarsaparillæ Comp* U. S.—L. E. D.

MISTŪRA ACACIÆ. L. E. Mixture of Acacia. (*Acaciæ cont.* ℥x., *Aquæ Ferventis* Oj. L. Sweet Almonds ʒx., Pure Sugar ʒx., Mucilage fʒiiij., Water Oij. E.)

Comp. Simple solution of gum in water or in almond mixture.

Oper. and *Use.* Demulcent: as a medium for combining oils, resins, and balsams with water.

MISTURA ALTHÆÆ. E. Mixture of Marsh Mallow. (*Althea

Root, dried, ℥iv., *Raisins, seeded,* ℥ij., *Boiling Water* Ov. Boil to Oiij., strain, and pour off the clear solution.)

Prop. Demulcent.

Use. In calculous affections.

MISTURA AMMONIACI. U. S.—L. Lac Ammoniaci, D. Mixture of Ammoniac. (*Ammoniaci* ʒv., *Aquæ* Oj. Rub the ammoniacum, adding the water gradually, until they are perfectly mixed.) *Lac Ammoniaci.*

Comp. The resin and oil suspended by means of gum in water; when kept, the resin separates.

Oper. and *Use.* The same as of the ammoniacum.

Dose. f℥ss. to f℥j. united with ipecacuanha, tincture of squills, &c.

Incomp. Bichloride of mercury, acetate of potassa, oxymel, æther, spirit of nitric æther.

MISTURA AMYGDALÆ. U. S.—L. D. Mistura Amygdalarum E. Almond Mixture. (*Confectionis Amygdalæ* ℥ijss., *Aq. Distillatæ* Oj. Rub together, adding the water by degrees, and strain.) Or, take of *Sweet Almonds* ℥ss., powdered *Gum Arabic* ʒss., *Sugar* ʒij., *Distilled Water* ℥viij. Macerate the almonds in water, and having removed their external coat, beat them with the gum arabic and sugar, in a marble mortar, till they are thoroughly mixed; then rub the mixture with the distilled water gradually added, and strain.—*U. S. Phar.* *Lac Amygdalæ.*

Comp. The oil of the almond suspended in water by means of its mucilage; and fecula.

Oper. Demulcent, cooling; if the bitter almond be used, sedative.

Use. In catarrh, gonorrhœa, strangury, hectic fever.

Dose. f℥ss. to Oss., or ad libitum.

Incomp. Acids, and all acidulous salts, spirits, tinctures, spirit of nitric æther, and common pump-water.

MISTURA ASSAFŒTIDÆ. U. S.—L. D. Mixture of Assafœtida. (*Assafœtidæ* ʒv., *Aquæ* Oj. Rub together, adding the water by degrees.) *Lac Assafœtidæ.*

Comp. The resin and volatile oil, suspended by gummy extractive in water.

Oper. The same as of the gum resin.

Use. In hysteria: and in spasmodic and convulsive affections, when pills cannot be swallowed. As a clyster in the irritations of the bowels which occur during dentition, and those produced by ascarides, and in ischuria.

Dose. fʒj. to f℥ss. frequently repeated during a paroxysm of hysteria, or the continuance of spasm.

MISTŪRA CAMPHŎRÆ. L. E. D. Camphor Mixture. (*Camphoræ* ʒss., *Spirit. Rectif.* ♏x., *Aquæ* Oj. Rub the camphor with the spirit, then gradually add the water, and strain.)

Comp. Camphor gr. j. 1-6th, in water f℥j. ?*

Oper. The same as that of the camphor, only in a weaker degree.

Use. In faintings, typhus and nervous fevers; but seldom given alone, the quantity of camphor being too small.

Dose. f℥ss. to f℥ij. united with cordial tinctures.

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* *Powell's Transactions of Lon. Phar.*

MISTŪRA CAMPHORÆ *cum* MAGNESIA. E. D. Mixture of Camphor with Magnesia. (*Camphoræ* gr. xij., *Magnesiæ Carbonatis* ℥ ss., *Aquæ* f℥ vj. Rub the camphor with the magnesia, the water being added, and mix.)

Comp. Camphor partly dissolved, partly mixed; magnesia, water.

Oper. Gently stimulant.

Use and *Dose.* The same as of camphor mixture.

MISTŪRA CASCARILLÆ COMPOSITA. L. Compound Mixture of Cascarilla. (*Infusi Cascarillæ* f℥ xvij., *Aceti Scillæ* f℥ j., *Tinctura Camphoræ comp.* f℥ ij., misce.)

Use. In chronic affections of the chest, attended with much debility.

Dose. f℥ j. to f℥ jss. twice a day.

MISTŪRA CREASOTÆ. E. Mixture of Creasote. (*Creasote, Acetic Acid,* ā ā ♏xvj., *Compound Spirit of Juniper, Syrup,* ā ā f℥ j., *Water* f℥ xiv.)

Use. A ready mode of administering creasote.

MISTŪRA CRĒTÆ. U. S.—L. E. D. Chalk Mixture. (*Cretæ p.* ℥ ss., *Sacchari pur.* ʒ iij., *Mist. Acaciæ* f℥ jss., *Aquæ Cinnamomi* f℥ xviij. Mix.) *Mistura Cretacea.*

Oper. Antacid, absorbent.

Use. In acidities of the stomach, particularly those attending dentition, provided the bowels be kept open; in diarrhœas, united with opium and catechu.

Dose. f℥ j. to f℥ ij. every three or four hours; or after every liquid motion.

MISTŪRA FERRI COMPOSITA. U. S.—L. E. D. Compound Mixture of Iron. (*Myrrhæ cont.* ʒ ij., *Potassæ Carb.* ʒ j., *Aq. Rosæ* f℥ xviij., *Ferri Sulph. cont.* ℈ ijss., *Spir. Myristicæ* f℥ j., *Sacch. pur.* ʒ ij. Rub together the myrrh, carbonate of potassa, and sugar; then add, while triturating, the rose water, the spirit of nutmeg, and, lastly, the sulphate of iron. Pour the mixture directly into a glass bottle, and stop it close.)

Comp. The salts are decomposed, and the mixture contains protocarbonate of iron, and sulphate of potassa, suspended with the other ingredients.

Oper. Tonic, emmenagogue.

Use. In all cases in which preparations of iron are useful; particularly in hysteria and chlorosis, depending on weak arterial action, after unloading the stomach and bowels.

Dose. f℥ j. to f℥ ij. twice or three times a day

Incomp. Acids, vegetable astringents.

MISTURA FERRI AROMATICA. D. Aromatic Mixture of Iron. (*Pulveris Cinchonæ Lancifoliæ in pulverem crassum redacti* ℥ j., *Radicis Colombæ concisæ* ʒ iij., *Caryophylli Aromatici contusi* ʒ j., *Limaturæ Ferri* ℥ ss. Digest for three days in a covered vessel, occasionally agitating, with a sufficient quantity of peppermint water to permit twelve ounces to be obtained by straining; then add *Tincturæ Cardamomi Compositæ* f℥ iij. *Tincturæ Aurantii* fʒ iij.)

Oper. Tonic.

Use. In dyspepsia, and some cases of debility.

Dose. From fʒ iv. to f℥ ij.

MISTŪRA GENTIANÆ COMPOSITA. L. Compound Mixture of Gentian. (*Infusi Gentianæ comp.* f℥ xij., *Infusi Sennæ comp.* f℥ vj., *Tinct. Cardam. comp.* f℥ ij. Mix.)

Use. As a mild tonic purgative in dyspeptic affections accompanied with costiveness.

Dose. f℥ jss. to f℥ ij.

MISTURA GUAIACI. L. E. Mixture of Guaiac. (*Guaiaci Resinæ* ʒ iij., *Sacch. pur.* ʒ iv., *Mist. Acaciæ* fʒ iv., *Aq. Cinnam.* f℥ xix. Rub the guaiacum with the sugar, then with the Mixture of Acacia; and add gradually the cinnamon water) *Lac Guaiaci.*

Oper. The same as the guaiacum in substance.

Use. In rheumatism, retrocedent gout, and dropsy.

Dose. f℥ ss. to f℥ ij. night and morning; diluting freely with tepid barley-water or gruel.

MISTURA HORDEI. E. See Decoctum Hordei.

MISTURA MOSCHI. L. Musk Mixture. (*Moschi, Acaciæ cont., Sacch. purif., sing.* ʒ iij., *Aq. Rosæ* Oj. Rub the musk with the sugar, then add the gum, and by degrees the rose-water.) *Mistura Moschata.*

Oper. Antispasmodic, diaphoretic.

Use. This is a convenient form of exhibiting musk. The late Mr. White, of Manchester, found the musk mixture, combined with ammonia ʒ ss., spirit of lavender fʒ j., and spirit of juniper f℥ j, of great utility in sloughing phagedenic ulcers, of a syphilitic and strumous nature.

Dose. f℥ ss. to f℥ ij. every four or five hours.

Incomp. Sulphas ferri, mineral acids, infusion of yellow cinchona.

MISTURA SCAMMONII. Mixture of Scammony. (*Resin of Scammony* gr. vij., *Milk* f℥ iij., form an emulsion.)

Comp. The gummy portion of the scammony, with a small portion of the oleo-resin, held suspended in the milk.

Use. As a purgative.

Dose. f℥ jss.

MISTURA SPIRITUS VINI GALLICI. Mixture of Brandy. (*Spir. Vini Gallici, Aquæ Cinnamomi, sing.* f℥ iv., *Ovorum duorum Vitellus, Cinnam Olei* ♏ij., *Sacchari pur.* ℥ ss. Mix.)

Use. Excitant. A dangerous mixture, calculated to encourage a desire for spirituous liquors.

MONARDA. U. S. M. Punctata. Herba. Horsemint. (*Diandria, Monogynia.* N. O. *Labiatæ. Indigenous.* ♃.)

Prop. Aromatic smell; warm, pungent, bitterish taste; abounds in a volatile oil.

Oper. Stimulant, carminative.

Use. In flatulent colic, and sick stomach.

Off. Prep *Oleum Monardæ,* U. S.

MORI. Baccæ. L. Mori Nigræ Baccæ, D. Mulberries. (Morus Nigra, *Monœcia Tetrandria.* N. O. *Urticaceæ.* Italy ♄.)

Prop. Inodorous; taste sweet, subacid; contains tartaric acid, jelly, and mucus.

Oper. Cooling, laxative.

Use. Seldom used medicinally; as an article of food, mulberries are wholesome, unless eaten too freely, in which case they occasion diarrhœa.

Off. Prep. *Syrupus Mori,* L.

MORPHIA. U. S.—L. Morphia. Morphina. Morphinæ

(*Hydrochlorate of Morphia* ℥j., *Sol. of Ammonia* fʒv., *Dis. Water* Oj. Add the hydrochlorate of morphia dissolved in the water to the solution of ammonia with f℥j. of water, and agitate. Wash the precipitate with distilled water, and dry it with a gentle heat. Or, take of *Opium*, sliced, ℔j., *Distilled Water*, *Alcohol*, each a sufficient quantity, *Solution of Ammonia* f℥vj. Macerate the opium with Oiv. distilled water twenty four hours, and having worked it with the hand, digest for twenty-four hours, and strain. In like manner macerate the residue twice successively with distilled water, and strain. Mix the infusions, evaporate to Ovj, and filter; then add, first, Ov. of alcohol, and afterwards f℥iij. of the solution of ammonia, previously mixed with Oss. of alcohol. After twenty-four hours, pour in the remainder of the solution of ammonia, mixed as before, with Oss. of alcohol, and set the liquor aside for twenty-four hours that crystals may form. To purify these, boil them with Oij. of alcohol till dissolved, filter the solution, while hot, through animal charcoal, and set it aside to crystallize.)—*U. S. Phar.*

Comp. Carbon 72.2, nitrogen 5.53, hydrogen 7.60, oxygen 14.8, in 100 parts.* Or 34 eq. of carbon=208.08+18 hydrogen=18+6 oxygen=48+1 nitrogen=14.15 equiv. 288.23.

Prop. Inodorous; colorless, or pure white; taste intensely bitter Crystals small, rectangular, four-sided prisms; inflammable; sparingly soluble in cold water and spirits of wine: water at 212° dissolves 1·100th of its weight.

Oper. Narcotic, excitant.

Use. Chiefly to prepare the more soluble salts. Dissolved in oil, and rubbed upon the skin, it produces narcotic effects.

Off. Prep. *Morphiæ Acetas*; *Morphiæ Hydrochloras*; *Morphiæ Sulphas*, L. E.

MORPHIÆ ACETAS. U. S.—L. E. Acetate of Morphia. (Take of Morphia *six drachms*, Acetic Acid *three fluid drachms* Distilled Water *four fluid ounces*. Mix the acid with the water and pour it upon the morphia to saturation. Evaporate with a gentle heat that crystals may form.† Or, take of *Morphia*, in powder, freed from narcotina by boiling with sulphuric æther, ℥j., *Distilled Water* Oss., *Acetic Acid* a sufficient quantity. Mix the morphia with the water; then carefully drop in the acid, constantly stirring, until the morphia is saturated and dissolved. Evaporate the solution by means of a water bath to the consistence of syrup. Lastly, dry the acetate with a gentle heat, and rub it into powder.)—*U. S. Phar.*

Comp. Morphia 1 eq.=288.23+acetic acid 1 eq.=51.48, equiv= 339.71.

Prop. Crystals small, acicular, of a greyish-white color, deliquescent, and easily decomposed by alkalies, and by water.

Oper. Narcotic.

Dose. From one-sixth of a grain to gr. ½; endermically, gr. ss. to gr. iij. to the skin, where the cuticle has been removed by a blister.

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* *Dumas* and *Pelletier*.

† As this acetate is decomposed by water, it should be kept in solution in distilled vinegar.

MORPHIÆ MURIAS. U. S.—E. Morphiæ Hydrochloras, L. Hydrochlorate of Morphia. Muriate of Morphia, U. S. Prepared from opium. (Or, take of *Morphia* in powder ℥j., *Distilled Water* Oss., *Muriatic Acid* a sufficient quantity. Mix the morphia with the water; then carefully drop in the acid constantly stirring, till the morphia is saturated and dissolved. Evaporate the solution by means of a water bath, so that it may crystallize upon cooling. Dry the crystals upon bibulous paper.—*U. S. Phar.*

Comp. Morphia 1 eq. 288.23+hydrochloric acid 1 eq. 36.42 equiv =324.65.

Prop. Crystals acicular, anhydrous, nearly colorless, inodorous and bitter; soluble in 16 parts of water; soluble in alcohol.

Use. As a narcotic it is preferable to the acetate.

Dose. Gr. ¼ to gr. ½.

MORPHIÆ MURIATIS SOLUTIO. E. Solution of Muriate of Morphia. (*Muriatis Morphiæ* ʒj., *Spirit. Vini rect.* f℥v., *Aq. Dist.* f℥xv. *Dissolve by the aid of a gentle heat.*)

Use. A ready mode of administering the hydrochlorate.

Dose. From ♏x. to fʒss.

MORPHIÆ SULPHAS. Sulphate of Morphia, F. Take of Morphia 6 parts, Distilled Water 12 parts, Sulphuric Acid diluted with twice its bulk of water, a quantity sufficient to saturate the morphia. Evaporate slowly, and crystallize.* To be kept in a stoppered phial. (Or, take of *Morphia* in powder ℥j., *Distilled Water* Oss., *Diluted Sulphuric Acid* a sufficient quantity; mix the morphia with the water, then carefully drop in the acid, constantly stirring till the morphia is saturated and dissolved. Evaporate the solution by means of a water bath, so that it may crystallize upon cooling. Dry the crystals upon bibulous paper.)—*U. S. Phar.*

Prop. Inodorous; taste bitter; crystals silky tufts, soluble in two parts of water at 60°.

Oper. Powerfully narcotic and sedative.

Use. In all cases requiring the use of opium.

Dose. From gr. ⅙ to gr. ⅓.

⁂ *It is distinguished from sulphate of quina, which it resembles, by becoming red when treated with concentrated nitric acid.*

MOSCHUS. U. S.—L. E. D. Musk. (Moschus Moschiferus, the Musk Deer. *Mammalia Pecora*, L. *Ruminantia*, *Cuv.* Asia.)

Prop. Odor peculiar, aromatic, strong, durable; taste bitterish; color dark reddish brown; feel slightly unctuous; partially soluble in water, yielding to it taste and smell; soluble in alcohol and sulphuric acid, with the loss of its odor.

Oper. Stimulant, antispasmodic, diaphoretic.

Use. In spasmodic affections, as hysteria, singultus, pertussis, trismus, and epilepsy. In epilepsy we have seen it, when given to the extent of ʒss. three times a day, stop the fits in an old and confirmed case for three months. In typhus attended with subsultus tendinum; in cholera it checks the vomiting; and it arrests the progress of gangrene. It raises the pulse, and excites the nervous system without heating.

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* *Codex Medicamentarius.*

Dose. Gr. ij. to ʒss. every three or four hours, in a bolus.

Off. Prep. *Mistura Moschi*, L. *Tinct. Moschi*, D.

MOXA. A mode of producing counter-irritation by burning different substances on the skin. It should be of some spongy, light, vegetable matter, readily combustible, as cotton, agaric, hemp, or flax, steeped in a solution of nitre; the pith of the sunflower. The common Moxa is prepared by rolling cotton into the form of a truncated cone or cylinder, about an inch long, wrapped round by a piece of fine linen, fastened at the side by a few stitches; or a piece of linen or paper, cut of the proper size, and steeped in alcohol, is laid on the surface and set fire to.

Oper. A valuable counter-irritant, and revellent.

Use. In all cases where counter-irritation of a deep and permanent kind is indicated.

MUCILAGO. U. S.—E. Muc. Gummi Arabici, D. Mucilago Acaciæ, U. S. Mucilage of Acacia. (*Acaciæ Gummi cont.* ℥ix., *Aq. Frigidæ* Oj. Rub the gum with the water gradually added, and strain.) *Mucilago Gummi Arabici.*

Oper. Demulcent.

Use. To allay the tickling which keeps up the cough in catarrh; but chiefly to suspend insoluble matters in water and thin fluids.

Dose. f ʒ j. to f ℥ j. united with syrup of poppies, occasionally.

Incomp. Alcohol, æther, the metallic salts.

Off. Prep. *Potassio-Carbonatis Calcis*, E.

MUCILAGO AMYLI. E. D. Mucilage of Starch. (*Amyli* ʒiv., *Aquæ* Oj. Rub the starch, with the water gradually added, then boil it for a few minutes.)

Prop. A gelatinous, opaline, colored, insipid, inodorous solution; soluble in boiling water, insoluble in alcohol.

Oper. Demulcent, sheathing.

Use. Seldom given by the mouth, except in abrasions of the stomach; as clysters in diarrhœa, dysentery, and other intestinal irritations; particularly as a vehicle for exhibiting opium in enema.

Incomp. Iodine and its preparations.

MUCILAGO TRAGACANTHÆ. U. S.—E. Muc. Gummi Tragacanthæ, D. Mucilage of Tragacanth. (*Gummi Astragali Tragacanthæ Triti* ʒij., *Aq. Bull.* f ℥ viij. Macerate for twenty-four hours; then triturate till the gum is dissolved, and press through linen cloth.) *Mucilago Gummi Tragacanthæ.*

Use For pharmaceutical purposes.

MUCUNA. L E. Cowhage. (M. *Pruriens*, *Diadelphia*, *Decandria*. N. O. *Leguminosæ*.) Dolichos *pruriens*. The bristles of the pods a very useful anthelmintic.

Use. For dislodging the round worm.

MURIAS BARYTÆ. E. D. Barii Chloridum, U. S.—L. Muriate of Barytes. Chloride of Barium. (From the carbonate.) *Barii chloridum.*

omp. Hydrochloric acid 23.35, baryta 64.85, water 11.80 parts, when in crystals ?—(*Berzelius*.) Or 1 eq. barium=68.7+1 chlorine=35.42, equiv.=104.12.

op. Inodorous; taste bitter, disagreeable; crystals colorless; ermanent tables; soluble in three parts of water at 60° carcely at all in alcohol: 95 grains in solution, acidulated with nitric acid, are not wholly precipitated by 49 grains of sulphate of magnesia.

Use. For making the solution.

Off. Prep. *Solutio Muriatis Barytæ*, E. *Liquor Barii Chloridi*, U. S

MURIAS SODÆ SICCATUM. E. Dried Muriate of Soda. (Common salt fused.) *Dried Chloride of Sodium.*

Use. For the distillation of hydrochloric acid, which it affords colorless.

MYRISTICA. U. S.: **MYRISTICÆ OLEUM.** L. E. D. Myristicæ arillus, E. Nux Moschata *dictus ; Macis, et ejus Oleum Volatile*, D. Nutmegs, Mace, and the Essential Oil. (*Diœcia Monadelph.* N. O. *Myristaceæ.* The Moluccas. ♄.)

Prop. Nutmegs have a fragrant, aromatic odor, and an agreeable, pungent taste; are roundish, greyish brown, streaked, unctuous, and easily cut. Alcohol extracts their active matter. The mace is membraneous, of a red-yellow color, unctuous, with the odor and taste of the nutmeg. The oil is yellow, possessing the odor and taste of the nutmeg in an eminent degree.

Oper. Stimulant, stomachic, narcotic in large doses.

Use. To relieve nausea and vomiting, and to check diarrhœa; but chiefly to give flavor to other remedies. Being narcotic, they are hurtful in apoplectic and paralytic habits.

Dose. Of the nutmeg and mace, gr. v. to ℈j.; of the oil, ♏ij. to ♏vj.

Off. Prep. Of the nutmeg, *Spiritus Myristicæ*, U. S.—L. E. D *Tinct. Lavandulæ Comp.*, L. E. D. *Spir. Armoraceæ Comp.*, L. *Spir. Raphani Comp.*, D. *Confectio Aromatica*, U. S.—L. E. D. *Electuarium Catechu*, E. D. *Pulvis Carbonatis Calcis Comp.*, D. *Troch. Carbonatis Calcis*, E. D. Of the oil, *Spir. Ammoniæ Aromaticum*, D. *Pilulæ Scillæ*, D. *Emplastrum Picis*, L.

MYROXYLON. U. S. M. *Peruiferum.* Balsam of Peru. The Juice. (*Decandria, Monogynia.* N. O. *Leguminosæ.* South America. ♄.)

Prop. Viscid like syrup, of a dark reddish-brown color, fragrant odor; warm, bitterish taste: spec. grav. 1.14; inflammable; soluble in alcohol.

Comp. Resin, essential oil, benzoic acid; extractive matter, water.

Oper. Warm stimulating tonic, and expectorant.

Use. In chronic catarrhs, asthma, phthisis, gonorrhœa, leucorrhœa, amenorrhœa, chronic rheumatism, and palsy: externally, in chronic indolent ulcers.

Dose. fʒss. in mucilage of sugar, gum arabic, and water.

MYRRHA. U. S.—L. E. D. Myrrh. (Balsamodendron *Myrrha. Octand. Monogyn.* N. O. *Bursaraceæ.* Abyssinia, Arabia Felix. ♄.)

Comp. Resin, muco-extractive, volatile oil.

Prop. Odor fragrant, peculiar; taste bitter, aromatic; in reddish-yellow, light, brittle, irregular tears, or in masses; partially soluble in distilled water, when aided by friction; alcohol dissolves only the resin; soluble in alkalies; spec. grav. 1.360; easily pulverized.

Oper. Stimulant, expectorant.

Use. In cachectic complaints, humoral asthma, chronic catarrh and phthisis pulmonalis unattended by hectic or much active inflammation.

Dose. Gr. x. to ʒj. in powder, united with nitre, camphor, sulphate of potassa, sulphate of zinc, or of iron.

Off. Prep. *Tinct. Myrrhæ*, U. S.—L. E. D. *Tinct. Aloes et Myrrhæ*, U. S.—E. *Pilulæ Aloes Comp.*, U. S.—L. E. D. *Pil. Ferri Comp.*, U. S.—L. *Pilulæ Galbani Comp.*, L. D. *Pilulæ Assafœtidæ Comp.*, E. *Pilulæ Rhei Comp.*, U. S.—L. E.

MYRTUS PIMENTA. Vide Pimenta.

NAPTHA. A transparent, yellowish white, very light and inflammable, limpid liquid, found abundantly in Persia; also, obtained from the distillation of *petroleum* or *Barbadoes tar*, or Seneca oil, and in the formation of gas from coal, which is rendered pure by rectification (Burmah, Italy, Barbadoes, Kenhawa, Seneca Lake.)

Comp. Hydrogen and carbon.

Prop. Dissolves caoutchouc, and is therefore used in preparing surgical instruments of that material; clear, limpid, very inflammable. *Petroleum* is a black, nearly opaque liquid, of the consistence of molasses, unctuous to the touch, taste bituminous, odor strong, tenacious: spec. grav. 0.730 to 0.878; yields naptha by distillation, leaving a solid residue of *asphaltum*; little affected by alcohol, acids, or alkalies, but dissolves in æther and the fixed and volatile oils.

Med. Prop. and *Uses.* A stimulating antispasmodic and sudorific, given in disorders of the chest, especially in the West Indies; for the tapeworm in Germany, by mixing one part petroleum with one and a half parts Tinct. Assafœtida, of which 40 drops are given three times a day. Latterly recommended highly in the cure of consumption. Also, in cutaneous diseases I have found it a good substitute for the vulgar tar ointment. Mix ℈iij. naptha with ℈xxx. lard, and apply in tinea, psoriasis, &c. When applied to the tongue, it causes a peculiar heat and pricking sensation, which extends down the throat and bronchial tubes, and exciting a spasm of the latter, ends in inducing a cough of a kind very efficacious in clearing the air cells and bronchia of accumulations of mucus: hence its use in the asthmatic coughs of old people, and where expectoration is scanty from debility.

Dose. Mix ℈j. naptha, suspended by a small quantity of boiling alcohol, in ℥iv. simple syrup, and give a teaspoonful every fifteen minutes till expectoration is fully established. Or as an *electuary*, by mixing gr. x. naptha with gr. xxx. honey or molasses, or in that proportion, and giving a tablespoonful, as before. ʒss. to ʒj. of petroleum, in any convenient vehicle, is a dose. And externally as a stimulating embrocation in chilblains, chronic rheumatism, affections of the joints, and paralysis.

British Oil is made by mixing the following ingredients: ℞ Olei Terebinth. f℥viij., Olei Lini f℥viij., Olei Succini f℥iv., Olei Juniperi f℥iv., Petrolei Barbadeus f℥iij., Petrolei American (Seneca oil) ℥j. Mix.—(*Jour. Phil. Col. Phar.*, *V.* 29.) L.

NUX VOMICA. U. S. Vide Strychnos.

OLEUM ÆTHEREUM. L. Æthereal Oil. (Formed in the distillation of Æther.) *Oleum Vini*

Prep. Odor and taste of æther; less volatile; oily, thick, of a yellow color: insoluble in water, soluble in alcohol.

Use. As an ingredient in the compound spirit of æther.

Off. Prep. *Spiritus Ætheris Sulphurici Compositus*, L. D

OLĔUM AMYGDĂLÆ. U. S.—L. Ol. Amygdalæ Communis, E. Ol. Amygdalarum, D. Oil of Almonds. (Expressed from both sweet and bitter almonds.) ℥xvj. of almonds yield ℥v. of oil. *Oleum Amygdalæ.*

Comp. Sweet almonds contain hydrocyanic acid, volatile oil, fixed oil 28, emulsion 30, sugar 6, gum 3, seed coats 8, woody fibre 5.—(*Vogel.*) The oil contains elaine 76, margarin 24—(*Braconnot*), carbon 77, hydrogen 11, oxygen 10, nitrogen 0.28.—(*Saussure.*) The bitter almonds contain *amygdalin* and *benzule* (See Pareira, vol. ii., p. 1107–8.)

Prop Inodorous, insipid; of a pale straw color; unctuous, limpid, lighter than water; insoluble in water and alcohol, but miscible in distilled water by means of mucilage or yolk of egg; attracts oxygen from the atmosphere, and becomes dense, viscid, and rancid

Oper. Demulcent, emollient.

Use. In catarrh and coughs, united with water by means of mucilage and sugar, or a few drops of liquor ammoniæ. An injection composed of oil of almonds f℥iv., and solution of subacetate of lead ♏viij., is said to be useful at the commencement of gonorrhœa.

Dose. f℥ss. to f℥j.

OLĔUM ANÉTHI. E. Oil of Dill. (From the seeds of the *Anethum Graveolens.*)

Prop. Light yellow; taste sweetish and hot; soluble in 1440 times its weight of water; spec. grav. 0.881.

Oper. Stimulant.

Use. In flatulent colic.

Dose. ♏ij. to ♏vj.

OLĔUM ANISI. U. S.—L. E. D. Oil of Anise. (Obtained by distillation from the seeds of *Pimpinella Anisum.**

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* All the volatile oils are volatile at a low temperature; soluble in alcohol, and separated from it by water; highly inflammable; and decomposed in a high temperature, hydrogen being evolved, and charcoal obtained. Their components are carbon, hydrogen, and oxygen; and they differ from the fixed oils, in containing less carbon in proportion to the hydrogen. They are divisible, according to Thomson, into three kinds:—1. Those which contain only *carbon* and *hydrogen:* these are lighter than water, and combine in definite proportions with acids; hence are probably *bases*—2. Those that contain *carbon*, *hydrogen*, and *oxygen:* these are probably heavier than water, and combine with bases, and are hence considered analogous to *acids*.—3. *Vesicating oils;* containing *sulphur*, and probably *azote*. They unite with difficulty with the alkalies, more easily with their carbonates; and can be suspended in water by means of sugar and mucilage. Their adulteration with fixed and cheaper essential oils is detected by evaporating a drop on paper, and examining the odor; and observing whether a greasy stain be left on the paper, which is the case when they are mixed with fixed oil; mixed with alcohol,

Comp. Carbon 81, hydrogen 8, oxygen 10.
Prop. Odor that of the vegetable; taste pungent, bitter, sweetish; pale yellow color; crystallizes at 50° Fahr. in flat tables.
Oper. Stimulant, carminative.
Use. In flatulent colic.
Dose. ♏v. to ♏xv. rubbed up with sugar and camphor mixture.
Off. Prep. *Tinctura Opii Ammoniata*, E. *Tinct. Camph. Comp.*, L. *Tinctura Opii Camphorata*, E.

OLĔUM ANTHEMĬDIS. L. E. Oil of Chamomile. (By distillation from the flowers of *Matricaria Chamomilla*. The *Anthemis*, *Arnica*, and *Achillea*, also yield blue-colored oils.) *Oleum Chamæmeli*.
Prop. Odor that of the flower; taste pungent; color when recent cerulean blue; but when old, a dark yellow.
Oper. Stimulant, antispasmodic.
Use. In colica, cramps of the stomach and as an adjunct to purgative pills.
Dose. ♏v. to ♏x.

OLĔUM CAJUPETI. U. S. Oil of Cajuput. (*Secondary.*) (Obtained from the *Melaleuca Cajuputi*, from the Moluccas.)
Prop. Very fluid; fine bluish-green color; lively, penetrating odor; warm, pungent taste; very volatile; spec. grav. 0.978 at 48°; often adulterated with turpentine and oil of rosemary.
Oper. Powerfully stimulant.
Use. In epilepsy, palsy, chronic rheumatism, spasmodic affections of the stomach and bowels, cholera. Mixed with olive oil, it is used externally in gout and rheumatism; also for toothache.
Dose. One to five drops in emulsion, or on sugar.

OLĔUM CARŬI. U. S.—L. E. D. Oil of Caraway. (By distillation from the seeds.) *Carum Carui.*
Prop. Odor that of the seeds; taste pungent, sweetish; color yellow; tenacious.
Oper. Stimulant, carminative.
Use. In flatulent colic; and as an adjunct to purgative pills.
Dose. ♏j. to ♏x.
Off. Prep. *Electuarium Sennæ*, D. *Confectio Scammonii*, L. *Pilulæ Aloes Comp.*, L. *Pilulæ Aloes cum Myrrha*, D.

OLĔUM CARYOPHYLLI AROMATICI. U. S.—E. Oil of Cloves. (From distilling the unripe fruit of *Eugenia Caryophyllata*.)
Prop. Hot taste; brown color; spec. grav. 1.050; combines with bases, showing acid properties; composed of two oils, which may be separated by distilling with potash ley.
Use. The same as cloves.
Dose. ♏j. to ♏iv.

OLĔUM CHENOPODII. U. S. Oil of Wormseed.

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they become milky on the addition of water to the suspected oil In preparing them, put the substance from which the oil is to be extracted into a retort, or other vessel suitable for distillation, and add enough water to cover it; then distil into a large refrigeratory. Separate the distilled oil from the water which comes over with it.—*U. S. Phar.*

Prop. Color light-yellow, becoming brownish by age. Spec grav. 0.908.

Oper. Anthelmintic.

Dose. Four to eight drops for a child, repeated morning and evening for three or four days, and then followed by a brisk cathartic.

OLĔUM COPAIBÆ. E. Oil of Copaiba.

Use. The same as the copaiba.

OLĔUM FŒNICŬLI. U.S.: DULCIS. D.E. Oil of Fennel Seeds. (By distillation from the seeds.)

Comp. Carbon 81, hydrogen 8, oxygen 10.

Prop. Odor that of fennel; taste pungent, sweetish, hot; color aqueous; congeals under 32°.

Oper. and *Use.* The same as of the seeds

Dose. ♏ij. to ♏xx.

OLĔUM GAULTHERIÆ. U. S. Oil of Partridge Berry. (From the leaves of the *Gaultheria Procumbens*. It is found also in the bark of the *Betula lenta*, the root of the *Polygala Paucifolia*, roots and stems of the *Spirea Ulmaria*, *Spirea Lobata*, and *Gaultheria Hispidula*.)

Prop. Of a brownish yellow color; sweetish, peculiar taste; an agreeable, characteristic odor; heaviest of the known essential oils; spec. grav. 1.17.

Use. To cover the taste of other medicines.

Off. Prep. *Syrupus Sarsaparillæ*, U. S.

OLĔUM HEDEOMÆ. U. S. Oil of Pennyroyal. (From the *Hedeoma Pulegioides*.)

Prop. Color light yellow, odor and taste of the herb; spec. grav. 0.948.

Use. As a stimulant in flatulent colic and sick stomach, and to impart flavor to mixtures.

Dose. Two to ten drops.

OLĔUM JECINORIS ASELLI. Cod-Liver Oil. (A fish oil obtained from several fishes belonging to the genus *Gadus*, by exposing to the sun the livers cut in slices, and collecting the oil that runs out. That which runs out first resembles olive oil, and is called yellow cod-liver oil. If the livers are in a state of putrefaction, the oil becomes of a chestnut-brown color.)

Prop. Color varies from light yellow to a reddish brown; clear or turbid; smell faint, or like that of old salt herrings; taste of the brown like that of train oil, empyreumatic, bitter, somewhat acrid, remaining a long time on the tongue; soluble in alcohol and æther; reddens litmus paper; owes its virtues to *bromine* and *iodine*.

Oper. Diuretic, alterative, slightly diaphoretic.

Use. Used extensively in Germany in scrofula, rickets, rheumatism, chronic cutaneous diseases, chorea, tubercles, atrophy.

Dose. ʒij. to ʒiv. two or three times a day; to children ʒj., with lemon syrup, coffee, or sugar and water. Externally in cases of ulcers, fistulæ, &c. Its therapeutical effects slowly developed.

OLĔUM JUNIPERI. U. S.—L. E. D. Oil of Juniper. (By distillation from the fruit.) *Ol. Juniperi Baccæ.*

Prop. Odor similar to that of turpentine; taste acrid, hot, similar *to that of the fruit*; color greenish yellow; deposits a feculent matter when kept; often adulterated with oil of turpentine, which may be detected by obtaining the specific gravity, which is thus rendered lighter than usual.

Oper. Stimulant, carminative, diaphoretic, diuretic.

Use. In dropsies; advantageously added to digitalis when it is given in the form of pills.

Dose. ♏ij. to ♏x. or more, rubbed up with sugar or mucilage and water.

OLĔUM LAVANDŬLÆ. U. S.—L. E. D. Oil of Lavender. (By distillation from the *Lavandula Spica.*)

Prop. Odor very fragrant, that of the flower; taste warm; of a lemon color.

Oper. Stimulant.

Use. In hysteria and nervous headaches.

Dose. ♏j. to ♏v. on a lump of sugar.

Off. Prep. *Unguentum Sulphuris*, E.

OLĔUM VOLĂTILE LAŬRI SASSĂFRAS. E. Ol. Sassafras, U. S.—D. Oil of Sassafras. (By distillation from the chips.)

Prop. Odor fragrant, that of the wood; taste acrid, very hot, burning the lips when tasted: limpid, yellow, heavier than water; often adulterated with oil of lavender and oil of turpentine.

Oper. Stimulant, sudorific, diuretic.

Use. In scorbutus, chronic rheumatism, cutaneous diseases.

Dose. ♏ij. to ♏x. rubbed with sugar.

OLĔUM LĬNI. U. S.—L. D. Ol. Lini Usitatissimi, E. Linseed Oil. (Expressed from the bruised seeds.)

Comp. Nearly the same as those of olive oil, with some mucilage.

Prop. Odor strong; taste unpleasant, nauseous; does not congeal by cold; becomes easily rancid.

Oper. Demulcent, emollient, laxative.

Use. It has been given with advantage in ileus, when purgatives have failed; but it is chiefly used in the form of clyster, in flatulent colic, attended with costiveness; and in abrasions of the rectum; externally in burns and wounds.

Dose. f℥ss. to f℥j.; in clysters, f℥iij. to f℥vj.

Off. Prep. *Linimentum Aquæ Calcis*, E.

OLĔUM MENTHÆ PIPĔRITÆ. U. S.—L. E. Ol. Menthæ Piperitidis, D. Oil of Peppermint. (By distillation from the dried plant.) *Ol. Menthæ Piperitidis.*

Comp. Carbon 80, hydrogen 11, oxygen 8.

Prop. Odor strong, that of the plant; taste acrid, very hot and biting, with a peculiar sensation of coldness; lighter than water; color brown-yellow.

Oper. Stimulant, antispasmodic, carminative.

Use. In cramp of the stomach and flatulent colic.

Dose. ♏j. to ♏iij rubbed up with sugar or mucilage.

Off. Prep. *Pilulæ Rhei Comp.*, E. *Pilulæ Aloes cum Zingibere*, D.

OLĔUM MENTHÆ PULEGII. E. Oil of Pennyroyal. (By distillation.)

Prop. Odor and taste of the plant; warm, pungent.

Oper. Excitant.

Use. In flatulence, hysteria, amenorrhœa.

Dose. ♏iij. to ♏viij.

OLĔUM MENTHÆ VĬRÍDIS. U. S.—L. E. D. Oil of Spearmint. (By distillation from the dried plant.)
Prop. Odor that of the plant; taste warm, pungent.
Oper. Stimulant, carminative.
Use. In flatulence and anorexia.
Dose. ♏ij. to ♏v. on a lump of sugar.
Off. Prep. *Infusum Menthæ Comp.*, D.

OLĔUM MONARDÆ. U. S. Oil of Horsemint. (From the fresh herb of *Monarda Punctata*.)
Prop. A reddish-amber color; fragrant odor; warm and very pungent taste.
Use. A powerful rubefacient; also stimulant and carminative.

OLĔUM MYRISTICÆ U. S. Oil of Nutmeg. (Obtained from the fruit of the *Myristica Moschata*.)
Prop. Two oils are obtained from the nutmeg: a *fixed* oil, and a *volatile* oil; the first by expression, the last by distillation with water; is yellowish; spec. grav. 0.920; deposits a solid crystallized matter, soluble in alcohol and æther.

OLĔUM ORIGĂNI. U. S.—L. E. D. Oil of Origanum. (By distillation from the dried plant.)
Prop. Odor that of the plant; taste hot, very acrid; of a yellow color.
Oper. Stimulant, narcotic.
Use. Scarcely ever given internally; a drop of it put into a carious tooth relieves the pain of toothache.

OLĔUM PIMENTÆ. U. S.—L. E. D. Oil of Pimento. (By distillation from the covering of the fruit of the *Myrtus Pimenta*.)
Prop. Odor very fragrant; taste that of the pimento in an increased degree; color a red brown; heavier than water; combines with bases like the oil of cloves.
Oper. Stimulant.
Use. In debilities of the stomach, colic, and tympanitis.
Dose. ♏iij. to ♏v. rubbed with sugar.
Off. Prep. *Emplast. Aromaticum*, D.

OLĔUM PIPERIS CUBEBÆ. E. Ol. Cubebæ, U. S. Oil of Cubebs.
Oper. Stimulant, diuretic.
Use. The same as the cubebs; but less efficacious in gonorrhœa.

OLĔUM RICINI. U. S.—L. E. D. Castor Oil. (Bruise the castor seeds, previously decorticated; then express the oil without the application of heat.) ℥xiv. of the seeds yield about f℥iij. of oil. *Ol. e Seminibus Ricini.*
Prop. Recently drawn, inodorous, nearly insipid; colorless, or of a very pale straw color; thick, but perfectly transparent; lighter than water. It becomes soon rancid by keeping, thickens, deepens in color to a reddish brown, and has a hot, nauseous taste; soluble in all proportions with alcohol and æther, and when so mixed lets fall all foreign bodies mixed with it.
Oper. Purgative.
Use. In all cases where stimulant purgatives would be hurtful; particularly in dysentery, colica pictonum; calculous complaints and ileus; and, as it operates very quickly, in spasmodic affections. It is an excellent purge at all times for children, women in child bed, and after surgical operations in which the viscera are at all concerned. It is also a good adjunct to clysters

Dose. f℥ss. to f℥jss. either floated on a little water, and covered with a small quantity of brandy, or in the following draught: ℞ Olei ricini f℥ss., mucilaginis q. s. tere optime, et paullatim adde, aquæ distillatæ f℥j., spir. lavandulæ comp. ♏xx., syr. tolutani f℥ss. Misce.

OLĔUM ROSÆ. Otto or Ottar of Roses. (By distilling the petals of the *Rosa Centifolia* with water; chiefly from Egypt and India, as the roses of this country yield so little oil as hardly to pay the expense of the process.)

Prop. Nearly colorless; delightful odor; spec. grav. 0.872; below 80° Fah. into a substance like butter; at 72° 1000 parts alcohol dissolve 33 parts oil of roses. Composed of two oils, one liquid, the other solid, and destitute of smell; separated by freezing, and pressing between folds of blotting paper.

Comp. Carbon 85.72, hydrogen 14.28.

OLĔUM ROSMARINI. U. S.—L. E. D. Oil of Rosemary. (By distillation from the tops of the dried plant.) *Oleum Roris Marini.*

Comp. The same as other essential oils, with some camphor.

Prop. Odor very fragrant, and taste like that of the plant; limpid like water; deposits crystals of camphor when long kept

Oper. Stimulant.

Use. In nervous complaints.

Dose. ♏ij. to ♏vj. rubbed up with sugar.

Off. Prep. *Tinctura Saponis*, E. *Alcohol. Ammoniatum Aromaticum*, E.

OLĔUM RŪTÆ. D. E. Oil of Rue. (Distilled from the dried plant.

Prop. Odor that of the plant, but weaker; taste strong of the plant, sharp, hot; color yellow; when kept it becomes brown, and deposits a brownish resinous sediment; easily congeals.

Oper. Antispasmodic; externally rubefacient.

Use. In hysteria, and the convulsive affections of infancy attending on dentition; externally in palsy.

Dose. ♏ij. to ♏v. rubbed with sugar or mucilage.

OLĔUM SABINÆ. U. S.—D. E. Oil of Savine. (By distillation from the dried plant.) *Juniperus Sabina.*

Comp. Carbon 88, hydrogen 11.

Prop. Odor and taste of the plant; limpid like water; color pale yellow.

Oper. Stimulant, emmenagogue; externally vesicant.

Use. In the same cases for which the plant is employed.

Dose. ♏ij. to ♏vj.

OLĔUM SAMBUCI. L. Oil of Elder Flowers. (By distillation.)

Prop. Odor that of the flowers.

Oper. Moderately excitant.

OLĔUM SASSAFRAS. U. S. Oil of Sassafras. (By distilling the chips or the root of the *Laurus Sassafras*, the last of which yields about two per cent.)

Prop. Color yellow; odor fragrant; taste aromatic and pungent; spec. grav. 1.094; separates, by agitation with water, into two oils; very often adulterated with oil of lavender and oil of turpentine, which may be separated by cautious distillation.

Oper. Stimulant, carminative, diaphoretic.

Dose. Two to ten drops.

OLĔUM SINAPIS. Oil of Mustard Seed. Sinapis Nigra et

Alba. Black and White Mustard. (*Tetradynamia, Siliquosa.* N. O. *Cruciferæ.* Europe. ⊙) Macerate the bruised seed in cold water several hours, then distil.—*Hamburgh Phar.*

Prop. Of a yellowish-white color; smells strongly of mustard; excites a violent pungent sensation; acrid, burning taste; causes a sense of burning, and intense redness and vesication on the parts to which it is applied.

Oper. A powerful stimulant and diuretic; externally revellent, counter-irritant, vesicant.

Use. In all cases of torpor of the system, where stimulants are indicated, as palsy, atonic dropsy, low forms of fever, some of the neuroses; externally in neuralgia, paralysis, subacute rheumatism, odontalgia, gastrodynia, &c.

Dose. Two drops may be mixed in ℥ vj. of an emulsion, and a tablespoonful given every two hours. Externally it is either rubbed on the skin, or applied by means of strips of linen dipped in the oil, which should remain on about ten minutes. This may be repeated twice a day in chronic diseases, especially to the trunk and extremities. This oil being very volatile, should be kept in vessels closely stopped.

OLĔUM SUCCĪNI. U. S.—L. E. D. Ol. Succini Rectificatum, U. S.—D. Oil of Amber. (Distilled from amber with a very gentle heat, and rectified.)

Prop. Odor strong, fetid, bituminous; taste pungent, acrid; soluble in water; imperfectly in alcohol; nearly colorless at first, but it gradually becomes brown.

Oper. Stimulant. antispasmodic, diuretic, rubefacient.

Use. In hysteria, epilepsy, and deficient menstruation; externally in paralysis, and chronic rheumatism of the joints. The following is recommended as a friction in tic douloureux: ℞ Ol. succini f℥j, tinct. opii f℥ss. Misce.

Dose. ♏v. to ♏xij. rubbed up with mucilage.

OLĔUM SUCCINI OXIDATUM. U. S. Oxidated Oil of Amber. (*Olei Succini* fʒj., *Acidi Nitrici* fʒiijss. Put the oil of amber in a glass vessel, and gradually drop the acid into it, at the same time stirring the mixture with a glass rod. Let it stand for thirty-six hours, then separate the supernatant resinous matter from the acid fluid beneath, and wash it repeatedly, first with cold, and, lastly, with hot water, till the acid taste be removed.)

Use. Recommended as a substitute for musk, to which it is analogous in its properties.

OLĔUM SULPHURATUM. E. Sulphuretted Oil. (*Sulphuris loti* ℥ ij., *Olivæ Olei* Oj. Heat the oil in a large iron pot, and throw in the sulphur by degrees, stirring the mixture after each addition till they unite.)

Prop. Odor extremely fetid; taste acrid; color reddish-brown, thick.

Oper. Stimulating, irritating; externally detergent.

Use. Now seldom given internally; but formerly it was much used in coughs, asthma, and other pulmonary complaints, and often proved hurtful. Externally it is applied to foul running ulcers.

Dose. ♏v. to ♏xx. in a glassful of water.

Off. Prep. *Emplast. Ammoniaci cum Hydrargyro,* L. *Emplast Hydrargyri,* L.

OLEUM TEREBINTHINÆ PURIFICATUM. L. E. D. Ol. Terebinthinæ, U. S. Rectified Oil of Turpentine. (*Olei Terebinthinæ* Oj., *Aquæ* Oiv. Cautiously distil over the oil.)

Prop. Odor penetrating; taste hot, pungent; colorless, limpid, lighter than water, volatile; sparingly soluble in alcohol. Contains two oils, the most volatile of which is called *Camphine*, by Dumas.

Oper. Stimulant, diuretic, sudorific, anthelmintic, rubefacient.

Use. In chronic rheumatism, lumbago, and sciatica; and in passive uterine hæmorrhages; dropped into the ear in deafness from defect of wax; applied to indolent tumors; and in embrocation, in rheumatism and bruises. It is given in very large doses, alone, or united with honey, against the tænia-solium, which it brings away entire, dead, after two or three doses.

Dose. ♏x. to f ʒj. in the first cases; but for the expulsion of tænia f ℥ss. to f ℥ij.

Off. Prep. *Linimentum Terebinthinæ*, U. S.—L. *Linimentum Cantharidis*, U. S.

⁂ *It forms the greater part of a reputed quack medicine, Whitehead's Essence of Mustard.*

OLEUM TIGLII. Croton Oil. (*Croton Tiglii. Nonæcia; Monadelphia.* N. O. *Euphorbiaceæ.* East Indies. ♄.)

Comp. Croton oil is obtained by expression from the seeds, which consist of 64 parts of kernel, 36 envelope, in the 100—and the cotyledons yield 60 per cent. of oil.

Prop. A thickish fluid, of a honey-yellow color, a faint but disagreeable smell, taste hot and acrid, leaving an impression which remains for many hours. Wholly soluble in sulphuric æther and oil of turpentine, and partially in alcohol. Consists of two portions—one acid and purgative, amounting to 45 per cent. (a *resin* and *Crotonic acid*), soluble in cold alcohol; the other, a mild oleaginous substance, like olive oil, soluble in æther and oil of turpentine. A fixed oil often adulterated.

Oper. A powerful hydragogue purgative, acting generally in moderate doses without pain, but in large doses excites vomiting and severe griping pain. A drop placed on the tongue, in a comatose state, will usually operate.

Use. In constipation and torpor of the intestines—in dropsy, apoplexy, mania, coma, inflammation of the brain, hydrocephalus, and whenever powerful revulsion from the head is indicated. Externally as a revellent, or counter-irritant, producing a pustular eruption in twelve hours after the first friction—in rheumatism and gout, phthisical affections, incipient phthisis, and in the neuroses, as palsy, hooping cough, spasmodic asthma.

Dose. ⅙ to ¼ and ½ a drop every two or three hours, in emulsion or pill. Externally, four to six drops may be rubbed in twice a day. If the skin is very sensitive, mix it with an equal portion of some fixed or volatile oil.

OLIBANUM. L. Boswellia Serrata. Gummi Resina, D. Olibanum. (Boswellia Serrata. *Decandria, Monogyn.* N. O. *Burseraceæ.* India. ♄.) *Olibanum, Gummi Resina.*

Comp. Gum resin, volatile oil.

Prop. Odor peculiar, aromatic; taste bitterish, slightly pungent; in grains of different sizes, semi-transparent, brittle; color reddish-yellow; partly soluble in alcohol; forms a milky emulsion when triturated with water.

Oper. Stimulant.

Use. Seldom used except as a perfume in sick rooms.

OLIVÆ OLEUM. L. E. D. Olive Oil. (Olea Europea. *Di-and. Monogynia.* N. O. *Oleaceæ.* South of Europe. ♄.) Expressed from the ripe fruit.

Comp. Carbon 79, hydrogen 21 parts; perhaps some oxygen: or according to *Braconnot*, of oil of a greenish-yellow color 72, very white suet 28 parts.

Prop. Inodorous, insipid; transparent, of the palest straw-color; lighter than water; cannot combine with it, nor with alcohol, but may be diffused through water by means of mucilage; boils at 600° of Fahr., therefore not volatile; congeals at 38°; attracts oxygen, and becomes rancid, when exposed to the air; forms soaps with the alkalies and lime; plasters, with oxides of lead. Its purity is ascertained by mixing with it 1-12th of its volume of a concentrated solution of pernitrate of mercury: if pure, it becomes like a firm fat in a few hours.

Oper. Demulcent, emollient, gently laxative.

Use. In catarrhs and pulmonary complaints; in emulsion with mucilage; in a simple state, when acrid matters are taken into the stomach; externally it has been advantageously used as a friction in plague; as an injection in gonorrhœa; an adjunct to clysters in dysentery and abrasions; and in the formation of ointments and plasters.

Dose. fʒj. to f℥j. triturated with mucilage, or mixed with water by means of a few drops of liquor potassæ, or liquor ammoniæ.

OPIUM. U. S.—L. E. D. Opium. (Papaver Somniferum. *Polyandria, Monogynia.* N. O. *Papaveraceæ.* South of Europe. ⊙.)

Comp. Gummy matter, resin, caoutchouc, gluten, a volatile oil, narcotina, codeia, meconina, narceia, morphia, meconic acid, alum, sulphate of lime, of potassa, of iron; besides which, opium generally contains ¼ its weight of impurities.

Prop. TURKEY OPIUM.—Odor heavy, narcotic; taste nauseous, bitter, acrid, warm; in flattish cakes, solid, tenacious; of a reddish-brown color, yellowish when powdered; marks on paper a light-brown interrupted streak. EAST INDIAN.—Odor the same, and empyreumatic; taste less bitter, but more nauseous; color darker. Opium is partially soluble in water and in alcohol; very soluble in vinegar and in oil.

Oper. Stimulant in small doses, but in larger, narcotic anti spasmodic, diaphoretic, sedative, anodyne; operating through the nerves on the living solid; externally, its stimulant effects are considerable, but soon followed by its narcotic.

Use. In all painful affections, where the inflammatory diathesis is not very considerable; in diarrhœa and dysentery; intermittents; in typhus, in smaller doses as a cordial, in larger to allay irritation and produce sleep; cholera and pyrosis; in rheumatism when inflammatory fever is not present; retrocedent gout; and in convulsive and spasmodic diseases. When combined with calomel, in inflammation after blood-letting, and in syphilis, as well as to arrest the progress of gangrene. It is employed in a watery solution containing gr. ij. in f℥j. of water, as an injection in gonorrhœa and spasmodic stricture, as an adjunct to clysters in diarrhœa; and by friction, united with oil, in tetanus and other spasms.

Dose. Gr. ¼ to gr. ss. to produce its stimulant effects; gr. j. to gr. ij., its narcotic; but in spasmodic complaints, it has been given to a very great extent.

Incomp. Lime-water alkaline carbonates, bichloride of mercury, nitrate of silver, sulphates of zinc, copper, and iron, infusion of yellow bark, astringent infusions and decoctions; solution of catechu and of kino; acetates of lead.

⁂ When opium has been taken as a poison, the stomach should be first evacuated by the stomach-pump, worked with infusion of yellow bark, or by emetics containing very little water, and after the whole of the opium has been evacuated, aromatic stimulants given, and mustard cataplasms applied externally.

Off. Prep. *Opium Purificatum*, D. *Confectio Opii*, U. S.—L. D. *Electuarium Opii*, E. *Electuar. Catechu*, E. *Extractum Opii* L. E. D. *Pilulæ Opii*, U. S.—E. *Pil. Saponis comp*., U. S.—L. *Pil. Styracis comp*., L. E. *Pil. Calomelane et Opii*, E. *Pil. Ipecac. et Opii*, E. L. *Pulv. Opiatus*, E. *Pulv. Cretæ Comp. cum Opio*, L. E. *Pulv. Ipecacuanhæ Comp*., U. S.—L. E. D. *Pulv. Kino Comp*., L. *Elect. Opii*, E. *Tinct. Opii*, U. S.—L. E. D. *Tinct. Camphoræ Comp*., U. S.—L. E. D. *Tinct. Opii Ammoniata*, E. *Troch. Opii*, E. *Tinct. Opii Acetata*, U. S. *Acetum Opii*, U. S.—E. *Vinum Opii*, U. S.—L. E. *Enema Opii*, D. E. *Linimentum Opii*, E. *Lin Saponis cum Opio*, D. *Emplastrum Opii*, U. S.—D. E.

OPOPONAX. L. D. Opoponax. (Opoponax *Chironium*, *Pentandria*. *Digyn*. N. O. *Umbelliferæ*. Italy. ♃.) Exudes from the roots when wounded. *Opoponax, Gummi Resina*.

Comp. Gum resin, a trace of caoutchouc, a volatile oil.

Prop. Odor strong, peculiar; taste bitter, acrid; in lumps of a reddish-yellow color, white within; forms a milky solution when triturated with water.

Oper. Antispasmodic, emmenagogue.

Use. In hysteria and chlorosis; but it is seldom used.

Dose. Gr. x. to ʒss.

ORIGANUM. U. S.—L. E. Common Marjoram. (Origanum Vulgare. *Didynam. Gymnosperm*. N. O. *Labiatæ*. Indigenous. ♃.)

Prop. Odor fragrant; taste aromatic, pungent, not unlike that of thyme.

Oper. Tonic, stomachic, emmenagogue?

Use. In debilities of the stomach: scarcely ever used.

Dose. Gr. x. to ℈j. in powder.

Off. Prep. *Oleum Origani*, U. S.—L. D.

ORIGANI MARJORANÆ HERBA. D. Sweet Marjoram. (*Class and Order as above*. Portugal. ⊙.) *Marjorana*.

Prop. Odor strong, fragrant; taste aromatic, bitterish.

Oper. Stomachic, errhine.

Use. Chiefly for culinary purposes; and as a snuff in headaches.

Off. Prep. *Pulv. Asari Comp*., D.

OS. U. S. Ed. D. Bone.

Prop. and *Comp*. Too well known to need description.

Off. Prep. *Sodæ Phosphas*, U. S.

OVUM. L. E. Egg (Phasianus Gallus, the Common Fowl, Cl. *Aves.* Ord. *Gallinaceæ.*)

Oper. Nutritive.

Use. The yolk and white swallowed raw are said to be useful in jaundice; in convalescences the yolk is given, beat up with sugar and wine; triturated with oils, it renders them miscible with water.

Off. Prep. *Mist Spir. Vini Gallici*, L.

OXĬDUM FERRI RŬBRUM. E. D. Red Oxide of Iron. (The sulphate of iron exposed to a strong heat, till it becomes red. The Dublin College orders it to be washed, and dried on blotting paper.) A peroxide. *Ferrum Vitriolatum Ustum.*

Comp. Iron 52, oxygen 48 parts, in 100 of the oxide; 2 eq. iron=56+3 oxygen=24, eq. 80: if it be not washed, it contains also a small portion of red sulphate of iron.

Prop. Taste styptic; the Edinburgh preparation deliquesces.

Oper. Tonic, stimulant.

Use. In the same cases as the other salts of iron, rarely used

Dose. Gr. v. to gr. x.

Off. Prep. *Murias Ammoniæ et Ferri*, E. D.

OXĬDUM ZINCI IMPŪRUM. E. D. Impure Oxide of Zinc. (Sublimed in roasting ores of zinc with galena.)

Comp. Zinc 85, oxygen 15 parts; but these proportions are doubtful, and tutty contains some metallic zinc and argil.

Prop. Inodorous, insipid, hard, ponderous, rough, and brownish on the outside; smooth and yellow within.

Use. For pharmaceutical purposes.

Off. Prep *Oxidum Zinci Impurum Preparatum*, E. *Unguentum Oxidi Zinci Impuri*, E. D.

OXĬDUM ZINCI IMPŪRUM PRÆPARĀTUM. E. Prepared Impure Oxide of Zinc. (Prepared in the same manner as impure carbonate of zinc.

Oper. Astringent.

Use. Externally in ophthalmia; as an adjunct to ointments; and dusted on the parts in superficial inflammation.

OXȲMEL. L. D. Simple Oxymel. (*Mellis* ℔x., *Acidi Acetici* Ojss. Mix the acid with the honey made hot.) *Mel Acetatum.*

Oper. Cooling, diaphoretic; externally detergent.

Use. In fevers and peripneumonia; as an adjunct to gargles in cynanche tonsillaris.

Dose. f ʒj. to f ℥j. dissolved in barley-water.

OXȲMEL COLCHICI. D. Oxymel of Meadow Saffron. (*Rad. Colchici rec. in laminas tenues sectæ* ℥j., *Aceti Distillati* ℔j., *Mellis despum. pond.* ℔ij. Macerate in a gentle heat for 48 hours. Strain by pressure, and boil the liquor with the honey, to the thickness of a syrup, stirring with a wooden spoon.) Much of the acrimony is destroyed by the boiling.

Oper. Expectorant, diuretic

Use. In humoral asthma, dropsy, and gout; inferior to squill.

Dose. f ʒj. gradually increased to f ℥ss. twice a day, dissolved in a cupful of gruel.

OXȲMEL SCILLÆ. U.S.—L.D. Oxymel of Squill. (*Mellis* ℔iij., *Aceti Scillæ* Oij Evaporate in a glass vessel, over a sand bath, to a proper consistence.) The boiling is hurtful, destroying the acrimony on which the virtue of squill depends

Oper. Expectorant, diuretic, aperient; in large doses emetic.

Use. In humoral asthma, chronic coughs, dropsy; to excite vomiting in pertussis.

Dose. f ʒ ss. to f ʒ ij. In cinnamon water, or any other aromatic water.

PAPAVER. U. S.—L. E. Papaver Album; Capsulæ, D White Poppy Capsules. (Papaver *Somniferum*. Class and Order, see *Opium*.) The ripe, dried seed-vessels. *Papaver Album, Capsula*. ⊙.

Oper. Relaxant, anodyne.

Use Externally as a fomentation (℥ iv. of the dried heads bein bruised and boiled in Oiv. of water to Oij), to inflamed or ulcerated parts. The addition of a little distilled vinegar aids the narcotic power of the decoction.

Off. Prep. *Syrupus Papaveris*, L. E. D. *Extractum Papaveris*, L. E.

PAPAVER RHŒADOS, Petala. See *Rhœas*.

PAREIRA. U. S.—L. E. Pareira. (Cissampelos Pareira.) *Diœcia Dodecandria*. N. O. *Menispermaceæ*. South America.

Use. See *Infusum Pareiræ*.

Off. Prep. *Infusum Pareiræ*, L. E.

PETRŎLĔUM. L. E. D. Barbadoes Tar.

Prop. Odor fetid; taste bitter, acrid; semi-liquid, tenacious, semi-transparent; of a reddish-brown color; insoluble in water and alcohol; combines with fixed and essential oils, and sulphur; and is partially soluble in æther.

Oper. Antispasmodic, sudorific; diuretic, expectorant; externally stimulant and discutient.

Use. In asthma, and coughs unattended with inflammation; skin diseases; externally in diseases of the hip-joint, rheumatic pains, chilblains and paralytic limbs, applied by friction.

Dose. ♏xx. to f ʒ j. has been taken in a day without inconvenience.

PHLORIDZINA. Phloridzine. (A peculiar bitter principle, which exists in the bark of the trunk and the roots of the apple, pear, cherry, and plum trees. Take the fresh root, digest in weak alcohol, at a temperature of 120°, for eight or ten hours; distil off the greater part of the alcohol, and crystallize the remainder.)—*Amer. Journ. Pharmacy*, Vol. ii., p. 240.

Prop. Silky spicula of a dead-white color, or long slender prisms, or tables—1000 parts of water at a temperature from 32° to 71°, dissolve one part; from 71° to 212° dissolves it in all proportions. Soluble in pure alcohol at ordinary temperatures. Has no action on test papers.

Oper. Tonic, antiperiodic.

Use. In intermittents and wherever tonics are indicated.

Dose. Gr iv. to gr. xvi. before the paroxysm.

PHOSPHAS SODÆ. U. S.—L. E. D. Phosphate of Soda (Prepared from bones and Sodæ Carbonas.)

Comp. Soda 19, acid 15, water 66 parts.—(*Thenard*.) 2 eq. soda =63.6+1 eq acid=71.4+24 eq. water=216, equiv.=350.

Prop. Inodorous; taste nearly that of common salt; crystals rhomboidal prisms; efflorescent; soluble in three parts of water at 60°.

Oper. Purgative.

Use. In all cases where the bowels require to be opened. When dissolved in broth made without salt, the taste of the phosphate is not perceived.

Dose. ℥j. to ʒij.

Incomp. Alum, chalk, and all salts with an earthy base

PHOSPHORUS. L. Phosphorus.

Use. For making phosphoric acid.

PHYTOLACCÆ BACCÆ ET RADIX. U. S. (*Secondary.*) *Phy. Decandria. Poke Berries, Poke Root* (*Decandria, Decagynia.* N. O. *Phytolaceæ. Indigenous* ♃.)

Prop. The berries have a sweetish, nauseous, and slightly acrid taste, with little odor. The dried root has no smell; sweetish taste. The coloring principle is very volatile. Juice contains saccharine matter.

Oper. Emetic, purgative, alterative, and narcotic. A narcotico acrid poison.

Use. The juice, evaporated to an extract, is employed as an escharotic by cancer doctors. As an alterative in small doses in chronic rheumatism. As an ointment in psora, tinea capitis, and other cutaneous diseases.

Dose. As an emetic, from gr. x. to gr. xxx. As an alterative, from gr. i. to gr. v.

PILŬLÆ ALOES. U. S.—E. Aloetic Pill. (*Aloes Socotrinæ, Saponis, sing. partes æquales, q. s. s.*)

PILŬLÆ ALOES COMPOSITÆ. L. D. Compound Aloetic Pills. (*Aloes contritæ* ℔j., *Ext. Gentianæ* ℥ss., *Olei Carui* ♏xl., *Syr. q. s. s.*)

PILŬLÆ ALOES CUM ZINGĬBĔRE. D. Pills of Aloes and Ginger. (*Aloes Hepat.* ʒj., *Rad. Zingib. in pulv. tritæ* ʒj., *Saponis Hispanici* ℥ss., *Ol. Essent. Menthæ Pip.* ʒss.)

Oper. In their operation these three are alike, warm stomachic purgatives.

Use. In habitual costiveness.

Dose. Gr. x. to ℈j. made into pills.

PILŬLÆ ALOES CUM MYRRHA. U. S.—L. E. D. Aloetic Pills with Myrrh. (*Aloes* ℥ij., *Croci Stigmatum, Myrrhæ, sing.* ℥j., *Syr. q. s. s.*)

Oper. Cathartic, emmenagogue.

Use. In chlorotic, hypochondriacal, and cachectic habits, to stimulate and open the bowels.

Dose. Gr. x. to ℈j. made into pills.

PILŬLÆ ALOES ET ASSAFŒTIDÆ. U. S.—D. Aloetic and Assafœtida Pills. (*Aloes Socotor., Conf. Rosæ, Assafœtidæ Saponis, sing. partes æquales, q. s.*)

Oper. Purgative, stomachic, anodyne.

Use. In dyspepsia attended with flatulence and costiveness; hysteria; amenorrhœa.

Dose. Gr. x. in pills twice a day; or at bed-time.

PILŬLÆ ALOES ET FERRI. E. Pills of Aloes and Iron (*Sulph. Ferri* gr. xxxvj., *Aloes Barb.* gr. xxiv., *Pulv. Aromat.* gr. lxx., *Conf. Rosæ q. s.*, ft. pilulæ xlviij.)

Use. An excellent combination of a tonic and purgative.

PILŬLÆ ASSAFŒTIDÆ. U. S.—E. Pilulæ Myrrhæ Comp. D. Compound Pills of Assafœtida. (*Assafœtidæ,* —— *Galbani,* —— *Myrrhæ, sing.* ℥iij., *Conf. Rosæ q. s.*)

Use. In hysteria and other nervous affections.

Dose Gr. v. to gr. x.

PILŬLÆ CALOMELANOS ET OPII. E. Pills of Calomel and Opium. (*Calomel* gr. xxiv., *Opium* gr. viij., *Conserve of Roses*, a quantity sufficient to make a mass to be divided into twelve pills.)

Use. For rapidly bringing the habit under mercurial influence.

PILŬLÆ CAMBŌGIÆ COMPOSITÆ. L. E. D. Compound Camboge Pills. (*Cambogiæ Contritæ* ʒj., *Aloes* ʒjss., *Zingiberis* ʒss., *Saponis* ʒij.)

Oper. Cathartic.

Use. In obstinate costiveness.

Dose. Gr. x. to ℈j. in pills occasionally.

PILŬLÆ CATHARTICÆ COMPOSITÆ. U. S. Compound Cathartic Pills. (Take of *Comp. Extract of Colocynth* ℥ss., *Ext. Jalap. Calomel*, ā ā ʒiij., *Gamboge* ℈ij., m. ft. pil. No. 180.)

Use. In constipation, and hepatic congestion.

Dose. Gr. ii. to gr. iv. twice a day.

PILŬLÆ COLOCYNTHIDIS. E. D. Compound Pills of Colocynth. (*Aloes Hepaticæ*, *Scammonii*, utriusque ℥j., *Medullæ Colocynthidis* ℥ss., *Saponis Hispanici* ʒij., *Potassæ Sulphatis*, *Olei Volatilis*, *Eugeniæ Caryophyllatæ*, utriusque ʒj., *Syrupi Empyreumaticæ*, *q. s. s.* Reduce the aloes, the scammony, and the sulphate of potassa to powder; then mix the pulp of the colocynth with the oil; and, lastly, rub the whole with the soap and the syrup into a mass.)

Oper. Cathartic, emmenagogue.

Use. In habitual costiveness; in chlorosis and hysteria.

Dose. From gr. viij. to ℈j.

PILŬLÆ COLOCYNTHIDIS ET HYOSCYAMI. E. Pills of Colocynth and Henbane. (*Colocynth pill* ʒij., *Extract of Henbane* ʒj. Make into xxxvj. pills.)

Use. The same as the Colocynth Pill.

PILŬLÆ CONII COMPOSITÆ. L. Compound Pills of Hemlock. (*Conii Ext.* ʒv., *Ipecacuanhæ pulv.* ʒj., *Mist. Acaciæ q. s.*)

Oper. Narcotic, antispasmodic.

Use. In phthisis, pertussis and bronchitis.

Dose. Gr. v. to gr. viij.

PILŬLÆ COPAIBÆ. U. S. *Pills of Copaiba.* (℞ *Copaibæ* ℥ij., *Magnesiæ* ʒj. Mix, and set aside till it concretes into a mass, which is to be divided into 200 pills.)

Use. In gonorrhœa and affections of the mucous membrane.

PILŬLÆ CUPRI AMMONIATI. E. Pills of Ammoniaret of Copper. (*Ammon. Cupri in pulv. ten. triti* gr. xvj., *Micæ Panis* ℈iv, *Aquæ Carbonatis Ammoniæ q. s.* Beat into a mass, and divide it into xxxij. equal pills.) *Pilulæ Cupri.*

Oper. Antispasmodic, tonic.

Use. In epilepsy and other spasmodic complaints.

Dose. One pill twice a day, gradually increasing the number till five are taken for a dose.

PILŬLÆ DIGITALIS ET SCILLÆ. E. Pills of Foxglove and Squill. (*Digitalis, Squill, of each* ℈j., *Aromatic Electuary* ℈ij. *Make into xx. pills.*)

Oper. Diuretic.

Use. In dropsy.

PILŬLÆ FERRI CARBONATIS. U S.—E. Pills of Carbonate of Iron. (*Saccharine Carbonate of Iron* ℥ ij., *Cons. of Roses, enough to make* xij. *pills.*)

PILŬLÆ FERRI COMPOSITÆ. U. S.—L. D. Compound Pills of Iron. (*Myrrhæ cont.* ʒ ij., *Sodæ Carbon.*, *Ferri Sulphatis*, *Sacch. fæc.*, *sing.* ʒ j.,)

Oper. Tonic, emmenagogue.

Use. In dyspepsia and chlorosis.

Dose. Gr. x. to ℈j. in pills, twice or thrice a day.

PILŬLÆ FERRI SULPHATIS. E. Pills of Sulphate of Iron (*Sulph. of Iron* gr. xxiv., *Ext. of Taraxacum* ℥ j., *Cons. of Roses* gr. xxiv. *Make into* xxiv. *pills.*)

Use. As a tonic, in dyspepsia connected with a torpid state of the liver.

PILŬLÆ GALBĂNI COMPOSITÆ. U. S.—L. D. Compound Galbanum Pills. (*Galbani* ℥ j., *Myrrhæ*, *Sagapenii*, *sing.* ℥ jss., *Assafœtidæ* ʒ iv., *Syrupi q. s.*)

Oper. Both these forms of pills operate as antispasmodics and emmenagogues.

Use. In chlorosis, hysteria, and hypochondriasis.

Dose. Gr. x. to ℈j. made into pills, every night at bed-time.

PILŬLÆ HYDRARGYRI. U. S.—L. E. D. Mercurial Pills. (*Hydrarg. Pur.* ʒ ij., *Confect. Rosæ Gallicæ* ℥ iij., *Glycyrrhizæ Rad. cont.* ʒ j. Rub the quicksilver with the confection until the globules disappear; then add the liquorice-root powder, and beat the whole into a uniform mass.)

Comp. Protoxide of mercury, and the other ingredients, the mercury being converted into the black oxide by the rubbing: hence the name should have been *Pilulæ Protoxidi Hydrargyri.*

Oper. Antisyphilitic, alterative; in large doses purgative.

Use. In syphilis, perhaps the best form of the remedy; in some cutaneous diseases and intermittents, attended with visceral and lymphatic obstructions; to purge in jaundice, dropsies, and ileus.

Dose. For the former objects, gr. v. to gr. x. twice a day, united with opium, if the bowels are easily affected; for the latter, gr. xij. to ℈j. every three or four hours.

PILŬLÆ HYDRARGYRI CHLORIDI COMPOSITÆ. L. D. Pilulæ Calomelanos Compositæ, E. Compound Pills of Chloride of Mercury. (*Hydrarg. Chlor.*, *Antimonii Oxysulphureti*, *sing.* ʒ ij., *Guaiaci contritæ* ʒ iv., *Sacchari fæcis* ʒ ij. After beating together these ingredients, form them into a mass.)

Oper. Alterative, diaphoretic.

Use. In lepra; secondary syphilis, affecting the skin, and old venereal ulcers. The decoction of elm bark, or of sarsaparilla, is generally ordered to be taken at the same time.

Dose. Gr. v. to gr. x. in pills, night and morning.

PILŬLÆ HYDRARGYRI IODIDI. L. Pills of Iodide of Mercury (*Hydrargyri Iodidi* ʒ j., *Conf. Cynosb.* ʒ iij., *Zingib. pulv.* ʒ j.)

Oper. and *Use.* The same as those of the Iodide of Mercury.

PILŬLÆ IPECACUANHÆ COMPOSITÆ. L. Pilulæ Ipecacuanhæ et Opii, E. Compound Pills of Ipecacuanha (*Pulv. Ipecacuan. Comp.* ʒ iij., *Scillæ sic.*, *Ammoniaci*, a a ʒ j Acacia Mixture *q. s.*)

Oper. and *Use.* The same as those of the compound powder of Ipecacuanha.

Dose. Gr. v. to gr. x.

PILŬLÆ PLUMBI OPIATÆ. E. Pills of Lead and Opium. (*Acetate of Lead* gr. lxxij., *Opium* gr. xij., *Cons. Roses* gr. xiv *Make into* xxiv. *pills.*)

Use. In active hæmorrhages.

PILŬLÆ QUININÆ SULPHATIS. U. S. (*Pills of Sulphate of Quinine.* ℞ *Sulph. Quin.* ℥ j., *Gum Arabic* ʒ ij., *Syrup* q. s. M. ft. 480 pills.)

PILŬLÆ RHEI. U. S.—E. Rhubarb Pills. (*Rhubarb in powder* ʒ ij., *Acetate of Potassa* ʒ j., *Cons. of Roses* ʒ ss. *Make into* xliv. *pills.*)

Use. A moderate purgative.

PILŬLÆ RHEI COMPOSITÆ. U. S.—L. E. Compound Rhubarb Pills. (*Rhei in pulv. tritæ* ℥ j., *Aloes* ʒ vj., *Myrrhæ* ʒ iv., *Saponis* ʒ j., *Ol. Carui* ʒ ss., *Syrupi q. s.* Beat them into a mass.)

Oper. Laxative, stomachic.

Use. In dyspepsia attended with costiveness.

Dose. Gr. x. to ℈ j. twice a day.

PILŬLÆ RHEI ET FERRI. E. Pills of Rhubarb and Iron. (*Sulph. of Iron* gr. xxiv., *Ext. of Rhubarb* ʒ j., *Cons. of Roses* ʒ ss. *Make into* xxiv. *pills.*)

Use. As a tonic and purgative in atonic dyspepsia.

PILŬLÆ SAGAPENI COMPOSITÆ. L. Compound Pills of Sagapen. (*Sagapeni* ℥ j., *Aloes* ʒ ss., *Syr. Zing. q. s.*)

Oper. Purgative.

Dose. Gr. x.

PILŬLÆ SAPONIS COMPOSITÆ. U. S.—L. D. Compound Pills of Soap. (*Opii duri Contriti* ʒ iv., *Saponis* ℥ ij.) Gr. v. contain gr. j. of opium *Pilulæ Opii.*

PILŬLÆ OPII *sive* **THEBAICÆ.** E. Opiate Pills. (*Opii partem unam, Ext. Glycyrrhizæ glob. partes* vij., *Fruct. Myrti Pimentæ partes* ij.) Gr. v. contain gr. ss. of opium.

PILŬLÆ STYRACIS COMPOSITÆ. L. Pilulæ Styracis, E. D. Styrax Pills. (*Styracis Pur.* ʒ iij., *Opii duri, Croci, sing.* ʒ j. Gr. v. contain gr. j. of opium)

Oper. These three forms are intended to operate as sedatives and anodynes.

Use. To procure sleep. The name of the last is well adapted for cases where the patient or his friends may have an objection to opium, as it can thus be given without appearing as an opiate in the prescription.

PILŬLÆ SCILLÆ COMPOSITÆ. U. S.—L. D. Pilulæ Scillæ, E. Compound Squill Pills. (*Scillæ Recent. exsiccatæ et cont.* ʒ j., *Zingiberis contritæ* ʒ ij., *Saponis* ʒ iij., *Ammoniaci contriti* ʒ ij., *Syr. q. s.* Form a mass.) *Pilulæ Scillæ.*

Oper. Expectorant, diuretic.

Use. In asthma and chronic catarrh; as an adjunct to digitalis in hydrothorax, and other dropsies.

Dose. Gr. x. to ℈ j. twice or thrice a day.

PIMENTA. U. S.—L. E. D. Pimenta Berries. (Myrtus *Pimenta. Icosandria. Monogynia.* N. O. *Myrtaceæ.* West Indies. ♄.) *Pimento, Baccæ.*

Prop. Odor aromatic, resembling a mixture of cinnamon, nutmeg, and cloves; taste pungent, but mixed like the odor; color reddish-brown. (The unripe fruit dried.)

Oper. Stimulant, carminative.

Use. Chiefly as a condiment; and as an adjunct to other medicines.

Dose. Gr. v. to ℈ij.

Off. Prep. *Aqua Pimentæ*, L. E. D. *Oleum Pimentæ*, L. E. D. *Spir. Pimentæ*, L. E. D. *Syrupus Rhamni*, L.

PIPER CUBEBÆ. L. See *Cubeba*.

PIPER LONGUM. L. E. D. Long Pepper. (*Diand. Trigyn.* N. O. *Piperaceæ*. Amboyna. ♃.) The unripe fruit dried in the sun.

Comp. Acrid, fatty matter, volatile oil, piperin, nitrogenous extractive, gum, bassorin, starch, malates and other salts.

Prop. Odor aromatic; taste warm, pungent; small round grains disposed spirally on a cylindrical axis.

Oper. Stimulant, carminative, tonic.

Use. In atonic dyspepsia, attended with flatulence: retrocedent gout; and paralysis. As a domestic condiment.

Dose. Gr. v. to ℈j.

Off. Prep. *Confectio Opii*, L. *Pulv. Cinnamomi Comp.*, L. D. *Pulv. Cretæ Comp.*, L. *Tinctura Cinnamomi Comp.*, L. E. D.

PIPER NIGRUM. U. S.—L. E. D. Piper Nigrum. Semen, D. Black Pepper. (*Class and Order as above.*) Ceylon. ♄.) The unripe fruit dried in the sun.

Comp. Acrid, soft resin, volatile oil, piperin, extractive, gum, bassorin, starch, malic and tartaric acid, woody fibre, salts of lime and potash.

Prop. Odor aromatic; taste pungent, fiery; color black, corrugated on the surface. Its pungency depends on an oleo-resin.

Oper. Tonic, antiperiodic, stimulant, carminative.

Use. To check nausea in gouty habits; remove hiccough; and increase excitement in palsy. Steeped in rum it cures ague. A watery infusion of pepper has been found a useful gargle in relaxation of the uvula.

Dose. Gr. x. to ℈j. variously combined.

Off. Prep. *Emplast. Meloes Vesicatorii Comp.*, E. *Ung. Piperis Nigri*, D. *Electuarium Piperis*, E. *Piperis Nigri Confectio*, L.

*** *White Pepper is the same fruit, freed from its cuticle by a preparation of lime and oil of mustard, called Chunam, applied before it is dried. It is less pungent.*

PIPERINA. Piperine. Obtained by Œrstadt, in 1819, from the *Piper Nigrum*.

Prop. Crystals of four-sided prisms; white, translucent; inodorous; has a feeble taste of pepper; fuses readily by heat. Scarcely soluble in cold water; somewhat more so in hot. Not an alkaloid, as its solutions do not react on vegetable colors.

Oper. Stimulant, antiperiodic, febrifuge.

Use. In intermittents, general debility, or weakness of the digestive apparatus; gonorrhœa.

Dose. Gr iij. to gr. viij., made into pills with some bitter extract, every three or four hours, during the apyrexia; or gr. j. every hour. From 40 to 50 grains are generally required to effect a cure.

PIPERIS NIGRI CONFECTIO. L. Confection of Black

Pepper. (*Piperis Nigri, Inulæ*, a a ℔j., *Fœniculi* ℔iij., *Mellis Sacchari, sing*. ℔ij.)

Oper. Stimulant, carminative.

Use. In hiccough, paralysis of the intestines, and gout affecting the stomach. In piles affecting leucophlegmatic habits.

Dose. From ℈ss. to ʒj.

PIX ABIETIS. U. S. Pix Abietina, L. Pix Burgundica, E Pinus Abies (vide *Abietis Resina.*) Pix Burgundica, D. Dried Pitch, or Burgundy Pitch.

Comp Resin: an essential oil.

Prop. Concrete, semi-transparent, unctuous, tenacious, fragrant.

Oper. Rubefacient, generally exciting an exudation of serous fluid.

Use. Externally, spread on leather as plasters; in catarrh, pertussis, dyspnœa.

Off. Prep. *Emplast. Picis*, U. S.—L. E. *Emplast. Meloes Vesic. Comp.*, E. *Emplast. Calefaciens*, D. *Emp. Opii*, U. S. *Emp. Galbani Comp.*, U. S. *Emp. Ferri* U. S.

PIX CANADENSIS. U. S. *Hemlock Pitch*. Canada and New England.

Prop. When prepared, it is of a hard, brittle, opaque form; dark greenish-brown color; of a weak, peculiar odor, and scarcely any taste.

Use. As a gentle rubefacient, analogous to Burgundy pitch, and employed in the same cases.

PIX LIQUIDA. U. S.—L. E. D. Tar. (Obtained by heat from the wood of the Scotch Fir. Pinus *sylvestris*.)

Comp. Resin, empyreumatic oil, charcoal, acetic acid.

Prop. Of a deep-brown color, semi fluid, tenacious; odor empyreumatic.

Oper. Stimulant, diuretic, sudorific; externally detergent.

Use. Internally in ichthyosis; externally it is applied to foul ulcers, and tinea capitis.

Off. Prep. *Unguentum Picis Liquidæ*, U. S.—L. E. D. *Aqua Picis Liquidæ*, D.

PIX NIGRA. L. Pix Arida, E. Black Pitch. (Pinus *sylvestris*. *For Class and Order*, vide *Abietis Resina*.) The solid prepared resin.

Prop. Solid, dry, brittle.

Oper. Stimulant.

Use. For preparing the ointment.

Off. Prep. *Unguentum Picis Nigræ*, L.

PLUMBI CARBONAS. U. S.—L. E. D. Carbonate of Lead. *Cerussa.*

Comp. Yellow oxide of lead, 83.5. carbonic acid 16.5 parts. (The yellow oxide contains lead 90.5, oxygen 9.5 parts in 100), or 1 eq. of protoxide of lead=111 6+1 eq. of carbonic acid=22.12, equiv.=133.72.

Prop. Inodorous; taste sweet; brittle, friable, snow-white, of a minute scaly texture. Gr. 68 are wholly soluble in ♏150 of acetic acid diluted with f℥j. of distilled water: this solution is not entirely precipitated by a solution of gr. 60 of phosphate of soda.

Oper. Astringent, sedative.

Use. Sprinkled on parts affected with local inflammation; in the formation of ointments and plasters.

Off. Prep. *Plumbi Acetas*, U. S.—L. E. D. *Unguentum Cerussæ*, E. *Ung. Plumbi Carbonatis*, U. S.

PLUMBI IODIDUM. L. E. Iodide of Lead. (A decomposition of the iodide of potassium by nitrate or acetate of lead. May be made by adding a solution of 100 parts hydriodate potassa to a solution of 75 parts of acetate of lead.

Comp. Lead 1 eq.=103.6+iodine 1 eq.=126.3 equiv.=229.9.

Prop. Golden-yellow colored powder, scarcely soluble in cold water, readily in hot water; solution crystallizes on cooling in hexagonal plates; sublimed by heat.

Oper. Deobstruent.

Use. In glandular affections, scrofula, and externally to discuss indolent tumors.

Dose. From gr. ¼ to gr. iv.

PLUMBI OXYDUM HYDRATUM. L. Hydrate of the Oxide of Lead.

Comp. Lead 1 eq.=103.6+oxygen 1 eq.=8 equivalent=111.6. The quantity of water has not yet been determined.

Prop. White, insipid, inodorous powder.

Use. For preparing disulphate of quina.

PLUMBI OXYDUM RUBRUM. U. S.—E. Red Oxide of Lead. (For preparing acetic acid.)

PLUMBI CHLORIDUM. L. Chloride of Lead. (*Plumbi Acetatis* ℥ xix., *Aquæ distillatæ ferventis* Oiij., *Sodii Chloridi* ℥ vj. Dissolve the salts separately and mix the fluids, and set them apart till the mixture cools. Wash them with distilled water, and dry.)

Use. For preparing the hydrochlorate of morphia.

PLUMBI OXYDUM. L.: **SEMIVITREUM.** U. S.—D. Lithargyrum, E. Semivitrified Oxide of Lead, or Litharge. (A yellow protoxide of lead, prepared by heat, and combined with carbonic acid; often adulterated with other oxides.) *Lithargyrus.*

Comp. Yellow oxide of lead 96, carbonic acid 4 parts in 100, or 1 eq. of lead 103.6+1 oxygen=8, equiv.=111.6.

Prop. In scales of a whitish-red color; semivitrified.

Use. For pharmaceutical purposes.

Off. Prep. *Plumbi Acetas*, U. S.—L. E. *Liquor Plumbi Diacetatis*, U. S.—L. E. D. *Emplast. Plumbi*, U. S.—L. E. D *Ceratum Saponis*, U. S.—L. *Emp. Resinæ*, U. S. *Emp. Opii*, U. S. *Emp. Hydrargyri*, U. S.

PLUMBI NITRAS. E. Nitrate of Lead.

Use. As a test for sulphates; and to form the Iodide of Lead.

PLUMBI ACETAS. U. S.—L. E. Acetas Plumbi, D. Acetate of Lead. (*Plumbi Oxydi* ℔iv., *Acidi Acetici* ℥ ij., *Aquæ distillatæ, sing.* Oiv.)

Comp. Oxide of lead 58, acetic acid 26, water of crystallization 16 parts; 1 eq. protoxide of lead=111.6+1 eq. of acetic acid 51.48+3 eq. of water=27, equiv. 190.08.

Prop. Inodorous; taste sweet, styptic; color very white, with a silky lustre; crystals spicular; soluble in 24 parts of water; the solution becomes turbid in common water: soluble also in alcohol; spec. grav. 2.345. Gr. 48 dissolved in distilled water, acidulated with acetic acid, should not be entirely precipitated by gr. 30 of phosphate of soda.

Oper. Astringent, in weak solutions, cooling and sedative; in strong (ʒj. to water f℥vj.), stimulant.

Use. Internal in visceral hæmorrhages washed down with water acidulated with distilled vinegar, which seems to prevent its deleterious effects. External, in solution in phlegmonous inflammations, burns, bruises, gonorrhœa, &c.

Dose. Gr. ss. to gr. jss. made into a pill with gr. ss. of opium and crumb of bread. Distilled water must be used for the solution, and a little acetic acid added.

Incomp. Alkalies, earths, acids, alum; borax, soaps, tartarized iron, and antimony; lime-water, hard water, sulphuretted hydrogen.

Off. Prep. *Ceratum Plumbi Acetatis* (Sub.), U. S.—L. E. D. *Acidum Acetosum Forte*, E. *Solutio Acetatis Zinci*, E.

PLUMBI DIACETATIS SOLUTIO. E. See *Liquor Plumbi Diacetatis.*

PLUMBI TANNAS. Tannate of Lead. (Prepared by precipitating an infusion of oak bark by acetate of lead.)

Use. As an unguent to excoriations and sloughing sores, produced by lying. It should be spread upon lint, or fine linen, and applied three times a day. Or, ʒij. of it may be mixed with ℥j. of *Unguentum Rosatum*, and applied as above.

PODOPHYLLUM PELTATUM. U. S. May Apple. *Radix* (*Polyandria, Monogynia.* N. O. *Podophyllæ.*) Indigenous.

Prop. Fruit subacid, sweetish taste; leaves poisonous; root inodorous—in powder has a sweetish smell; taste at first sweetish, then bitter, nauseous, and slightly acrid; contains a peculiar bitter principle, called *podophyllin.*

Oper. An active and certain cathartic, producing copious liquid discharges, resembling jalap.

Use. In most inflammatory affections, where brisk purging is indicated; also in bilious fevers and hepatic congestions; also in dropsical, rheumatic, and scrofulous complaints in combination with supertartrate of potassa.

Dose. Of the powdered root gr. xx. It is also used in the form of an *extract.*

Off. Prep. *Extractum Podophylli*, U. S.

POLYGALA RUBELLA. U. S. (*Secondary.*) *Bitter Polygala.* The Plant. Big. *Am. Med. Bot.* Indigenous.

Prop. Has a strong and permanent bitter taste, which it yields to water and alcohol.

Oper. Tonic, laxative, and diaphoretic, according to the dose.

Use. To impart tone to the digestive organs, in the form of infusion

POLYGALA SENEGA. See *Senega.*

POLYGONUM. D. Great Bistort. (Polygonum Bistorta. *Octand. Trigyn.* N. O. *Polygonaceæ.* Austria, Britain. ♃.)

Prop. Dried root inodorous; taste austere, styptic. Its virtues are extracted by water.

Oper. Powerfully astringent, tonic.

Use. In internal hæmorrhages, diarrhœa from debility; in agues, joined with calamus aromaticus.

Dose. Gr. xv. to ʒj. twice or thrice a day.

PORRUM. L. The Leek. (*For Class and Order, see Allii Radix.*)

Prop. Odor peculiar, fragrant; taste sweetish, slightly acrid.

Oper. Expectorant, diuretic.

Use. The juice of the recent bulb expressed has been advantageously used in dropsies and humoral asthma.

Dose. f ʒj. to f ℥ss. rubbed up with sugar, and mixed in water

POTASSÆ CARBONAS IMPURA. L. Impurus, U. S. Potassæ Carbonas, U. S.—E. Potassæ carbonas, a lixivio cinerea, D. Impure Potassa. (The Pearlash of commerce.) *Cineres Clavellati.*

Comp. Carbonate of potassa, sulphate of potassa, chloride of potassium, silex, oxide of iron, argil.

Use. For preparing the carbonate for medical purposes.

POTASSÆ CHLORAS. L. Chlorate of Potassa. (Prepared by passing a stream of chlorine through a concentrated solution of pure potassa until the alkali is neutralized.)

Prop. Inodorous, white; taste cool and austere.

Comp. Chloric acid 1 eq.=75.42+potassa 1 eq.=47.15, equiv.=112.67.

Oper. Stimulant, tonic.

Use. In typhus, and other depressing affections.

Dose. From gr. v. to ℈j.

POTASSÆ ET SODÆ TARTRAS. E. See *Sodæ Potassio-Tartras.*

POTASSA. U. S.—E. Potassa Caustica, D. Fused Potassa (Prepared by evaporating the solution of potassa to dryness in an iron vessel.) *Kali Purum.*

Comp. Potassium 83.3, oxygen 17.6, in 100 parts of pure potassa; or 1 eq. potassium=39.15+1 eq. oxygen=8, equiv.=47.15: but fused potassa contains also a little carbonate of potassa, silex, lime, and oxide of iron, which do not affect its medicinal properties.

Prop. Solid; of a grey color; deliquescent in the air; feels soapy between the fingers, owing to its dissolving the skin. (It is generally run into little cylindrical moulds, which require to be kept in well-corked phials.

Oper. Powerfully escharotic.

Use. For forming issues. It has also been used to remove strictures.

POTASSA CUM CALCE. L. E. Potassa Caustica cum Calce, D. (*Potassæ hydras, Calcis, sing.* ℥j.) *Calx cum Kali Puro.*

Comp. Potassa and lime mechanically mixed.

Oper. and *Use.* The same as the former, but more manageable, as it is less deliquescent.

POTASSÆ ACETAS. U. S.—L. E. D. Acetate of Potassa. (*Potassæ Carbon.* ℔j., *Acidi Acetici* f ℥xxvj., *Aquæ Distillatæ* f ℥xij. Mix, and add by degrees enough of acetic acid to saturate the alkali. Then strain, and evaporate in a sand bath with a moderate heat to dryness.) *Kali Acetatum.*

Comp. Potassa 51, acid 49; or 1 eq. potassa=47.15+1 acetic acid=51.48+2 eq. water=18, equiv.=116.63

Prop. Inodorous; taste sharp, pungent; white, shining; texture foliated, deliquescent; soluble in an equal weight of water; also in four times its weight of alcohol. The watery solution decomposes spontaneously.

Oper. Mildly cathartic, diuretic, deobstruent.

Use. In febrile diseases, dropsies, icterus, and visceral obstructions.

Dose. ℈j. to ʒj. as a diuretic; ʒij to ʒiij. open the bowels.

Incomp. Mineral acids, decoction of tamarinds, bichloride of mercury, nitrate of silver, sulphates of soda and of magnesia, hydrochlorate of ammonia, tartrate of potassa.

Off. Prep. *Acetas Hydrargyri*, E. D. *Tinct. Acetatis Ferri*, D. *Acidum Aceticum*, D.

POTASSÆ AQUA EFFERVESCENS. E. *Effervescing Solution of Potassa.* (*Bicarbonate of Potassa* ʒj., *Distilled Water* Oj. Transmit carbonic acid through the solution under strong pressure.)

Use. The same as that of the bicarbonate. It may be drunk in the same manner as soda water.

POTASSÆ CARBONAS. U. S.—L. D **Potassæ Carbonas Purus**, U. S.—E. Carbonate of Potassa. Salt of Tartar. (*Carbonatis Potassæ Impuræ* ℔ij., *Aquæ Dist.* Ojss.)

Comp. Potassa 43.56, carbonic acid 47.53, water of crystallization 8.91 parts; or 1 eq. potassa=47.15+1 eq. acid=22.12, equiv.=69.27.

Prep. Inodorous, taste alkalescent, caustic; crystals minute, white, deliquescent.

Oper. Diuretic, antacid, deobstruent.

Use. In dropsy, acidities of the primæ viæ, and glandular obstructions.

Dose. Gr. x. to ʒss. properly diluted; ℈j. dissolved in fʒviij of water, and mixed with fʒiv. of lemon juice, forms an effervescing draught.

Incomp. Mineral acids, borax, hydrochlorate and acetate of ammonia, alum, sulphate of magnesia, chloride of calcium, lime, lime-water, all the metallic salts.

Off. Prep. *Liquor Potassæ Carbonatis*, U. S.—L. *Potassii Iodidum*, U. S. *Potassii Sulphuretum*, U. S.

POTASSÆ BICARBONAS. U. S.—L. E. D. **Bicarbonate of Potass.** (*Potassæ Carbonatis* ℔vj., *Aquæ Dist.* cong. j. Saturate the solution with carbonic acid passed through it in a stream, and crystallize.) The carbonic acid is obtained from marble by the addition of diluted sulphuric acid.

Oper. and *Use.* The same as that of the carbonate, but it is less acrid.

POTASSÆ HYDRAS. *L.* **Potassæ Chloras.** **Kali Purum.** Hydrate of Potassa. (*Potassæ Liq.* cong. j.) Evaporate in a clean iron vessel till, ebullition being finished, the hydrate liquefies; then pour it into proper moulds.)

Comp. Potassium 83.34 per cent., oxygen 16.66.

Prop. Light-brownish or bluish tint, deliquescent, extremely caustic.

POTASSII BROMIDUM. L. **Bromide of Potassium.** (It may be prepared by dissolving bromine in spirits of wine, and adding caustic alkali, till the spirit begins to change color, then evaporating and heating to redness.—*Liebig.*)

Comp. Brome 1 eq. 78.4=potassium 1 eq. 39.15 equiv.=117.55.

Prop. Taste pungent, crepitates by heat, melts into a red hot flux, without undergoing any change. More soluble in hot than cold water—slightly soluble in alcohol.

Use. As a stimulant and deobstruent, in glandular affections and enlargement of the spleen. As an ointment in cutaneous diseases

Dose. From gr. iij. to gr. x. twice or thrice a day. The ointment is made by mixing gr. xxxvj. *Br. Pot.* with ℥j. lard.

POTASSII CYANURETUM. U. S. Cyanuret of Potassium. (See *U. S. Phar.*)

POTASSII CYANIDUM. Cyanuret of Potassium. (Expose to long-continued heat the ferro-hydrocyanate of potassa; calcine, and then separate the cyanide from the quadricarburet of iron by pure alcohol; on distilling this, the cyanide is obtained very pure.)

Prop. When pure, white and transparent; may be fused in the fire without decomposition, and keeps unchanged, if perfectly dry.

Oper. Sedative, narcotic.

Use. Majendie has shown that this is one of the most active poisons known. It has been successfully employed in neuralgia, and in the neuroses generally, cephalalgia, &c. Dissolve the *Cyanuret of Potassium* in eight times its weight of distilled water; add a few drops of some vegetable acid. This is called by Majendie the *Medicinal Hydrocyanate of Potassa*, and is to be given in the same dose, and under the same circumstances, as his *Medicinal Hydrocyanic Acid*, which is, one part of the hydrocyanic acid mixed with eight and a half times its weight of distilled water. The dose of the cyanide undiluted is ¼ of a grain, gradually increased to one grain. In neuralgia and rheumatism the *watery solution* (gr. ij. to gr. iv. to ℥j. water), is used by friction; or the *ointment* (gr. ij. to gr. iv. to ℥j. lard), in the same manner, to the part affected. In cephalalgia, it has been employed with success in the proportion of gr. vi. to gr. viij. to ℥j. water, wetting compresses with this lotion and applying to the temples and forehead.—(*Majendie's Formulary.*)

POTASSII IODIDUM. U. S.—L E. Hydriodas Potassæ, D. Iodide of Potassium. (Formed by decomposing the iodide of iron by carbonate of potassa.)

Comp. 1 eq. of iodine 126.3+1 potassium=39.15, equiv. 165.45.

Prop. Crystals opaque cubes, inodorous, taste penetrating; very soluble in water and in alcohol.

Use. The same as that of iodine; but chiefly as an alterative in secondary syphilis, rheumatism, lepra.

Dose. Of the saturated solution from ♏vj. to ♏xx., of the dry salt from gr. ij. to gr. xx. The author frequently orders it in doses of ℈j. to ʒss. Of the *Compound Tincture*, made by dissolving *Iodine* ℥j., *Potass. Iodid.* ℥ij., *Alcohol* Oij.; give ten drops three times a day. Of the *Compound Mixture*, made by mixing *Iodin.* gr. ss., *Potass. Iodid.* ʒss, *Syrup Papav.* f℥ss., *Aq. Distillat.* Oss.; two tablespoonsful three times a day, in cases of complication of scrofula with syphilis. Or, ℞ *Iodin.* gr. jss., *Potass. Iodid.* gr. iij.; solve in *Aquæ Menth. Pip.* ℥iv., a teaspoonful to children in *cancrum oris*, also in *dropsy*, *gleet*, and *leucorrhœa*.

Incomp. Acids, metallic salts not iodines.

POTASSÆ NITRAS. U. S.—L. E. D. Nitrate of Potassa, or Nitre. (Formed in an impure state by nature in warm climates, as India, and by means of artificial composts in France.) *Nitrum.*

Comp. Potassa 51.8, nitric acid 44, water 4.2, in 100 of nitrate; or 1 eq. potassa=47 15+1 eq. acid=54.15, equiv.=101.3.

Prop. Inodorous; taste cool, bitterish, penetrating; crystals six-sided prisms; permanent in the air; brittle, soluble in 7 parts of water at 60°.

Oper. Diuretic, refrigerant; in large doses purgative; externally cooling, detergent.

Use. In fevers, dropsies, herpetic eruptions, active hæmorrhages, mania. A small piece allowed to dissolve slowly in the mouth often removes incipient cynanche tonsillaris; hence its utility in gargles.

Dose. Gr. x. to ʒ ss. In doses of ℥ j. it occasions hypercatharsis, bloody stools, and sometimes death.

Incomp. Sulphuric acid, sulphates of soda and magnesia, alum, the metallic sulphates.

Off. Prep. *Trochisci Nitratis Potassæ*, E. *Acidum Nitricum*, L. E. D.

POTASSÆ NITRAS PURIFICATUM. D. Purified Nitrate of Potassa.

The above dissolved in boiling water and crystallized by cooling.

POTASSÆ SULPHAS. U. S.—L. E. D. Sulphate of Potassa. (The salt which remains after the distillation of nitric acid ignited until the excess of acid is driven off; then dissolved in the water, and crystallized.) *Kali Vitriolatum.*

Comp. Potassa 54.55, acid 45.45, in 100 parts of sulphate; or 1 eq. potassa 47.15+1 acid=40.1, equiv.=87.25.

Prop. Inodorous; taste bitter; crystals small, six-sided prisms, ended by six-sided pyramids, grouped; hard, transparent, permanent in the air; soluble in 16 parts of water at 60°; insoluble in alcohol.

Oper. Purgative, deobstruent.

Use. In the visceral obstructions to which children are liable; and as an adjunct to other purgatives

Dose. Gr. x. to ʒ j. acts as a deobstruent; ʒ ss. to ʒ vj. purge.

Incomp. Nitric and hydrochloric acids, tartaric acid, chloride of calcium, salts of mercury, nitrate of silver, salts of lead.

POTASSÆ SULPHAS CUM SULPHURE. E. See *Potassii Sulphuretum.*

POTASSII SULPHURĒTUM. U. S.—L. D. Potassæ Sulphas cum Sulphure, E. Sulphuret of Potassium. (*Sulphuris* ℥ j., *Potassæ Carbonatis* ℥ iv. Rub them together, and place the mixture in a covered crucible upon the fire until they unite, to be kept in a well-stopped bottle.) It is necessary first to dry the carbonate in a crucible exposed to a red heat.

Comp. Tersulphuret of potassium, sulphate of potash, carbonate of potash.—(*Berzelius.*)

Prop. Inodorous while dry, but when moistened fetid; taste acrid, bitter; color liver-brown; solid, brittle, deliquescent decomposed by water and exposure to the air.

Oper. Expectorant, diaphoretic; externally detergent.

Use. It has been given in chronic asthma, but without much benefit; chronic catarrh and rheumatism; arthritic cases; herpetic and other cutaneous diseases; and cancer. Its solution is useful as a wash in scabies and tinea capitis. It was formerly improperly used as an antidote against arsenical and saturnine poisons. As a bath, in the proportion of ℥ iv. to thirty gallons of water; as a lotion in local cutaneous affections in the strength of ℥ j. to two quarts of water.

Dose. Gr. v. to gr. xv. combined with soap, or extract of conium in pills or mixture twice or thrice a day; as an ointment, ʒss. of the sulphuret to ℥i. of lard.

Incomp. Acids, acidulous salts, metallic and earthy salts.

POTASSÆ SULPHURETI AQUA. D. Solution of Sulphuretted Potassa. (*Sulphureti loti* partem unam, *Potassæ Causticæ Aquæ* partes undecim. Boil for ten minutes, and strain through paper: preserve the solution in a close-stopped vessel. The spec. grav. should be 1.117.)

Use. The same as that of the solid sulphuret; chiefly used as an external application.

Dose. From ♏xx. to f ʒjss. twice a day.

POTASSÆ BISULPHAS. L. E. Potassæ Bisulphas. D. Bisulphate of Potassa. (*The salt remaining after the distillation of nitric acid* ℔ij., *Sulphuric Acid* ℔j., *Boiling Water* six pints. Dissolve the salt in the water, add the acid, and mix. Then boil; leave at rest to crystallize.)

Comp. Potassa 32.87, acid 54.80, water 12.33=100, or 1 equiv. potassæ 47.15+2 sulphuric acid=80.2+2 water=18, equiv.= 145.35.

Prop. Inodorous; taste a strong acid; soluble in two parts of water at 60°; insoluble in alcohol.

Oper. Refrigerant and purgative.

Use. In cases where it is wished to exhibit sulphuric acid, and at the same time open the bowels.

Dose. Gr. x. to ʒij.

POTASSÆ BITARTRAS. U. S.—L. E. D. Bitartrate of Potassa. Cream of Tartar. (The tartar of wine purified.) *Tartari Crystalli.*

Comp. Potassæ 33, acid 57, water 10 parts in 100 of the bitartrate. —(*Thenard*)

Prop. Inodorous; taste acid, harsh; crystals small, irregular; require 120 parts of water at 60° to dissolve them; brittle, pulverulent; decomposed when kept in solution.

Oper. Mildly purgative, refrigerant, diuretic.

Use. In ascites, proceeding from visceral obstructions; and to open the bowels in inflammatory habits. Dissolved in water, with a small quantity of white wine, some sugar, and lemon peel, it forms an excellent beverage in febrile diseases, under the name of Imperial.

Dose. ℈j. to ʒj. combined with ℈j. sodæ biboras, to excite the kidneys; and to open the bowels ʒiv. to ℥j. are required.

Incomp. Alkalies, alkaline earths, mineral acids.

Off. Prep. *Ferri Potassio-Tartras*, U. S.—L. *Ferrum Tartarizatum*, D. *Pulv. Jalapæ Comp.*, U. S.—L. E. *Pulv. Scammonii Comp.*, E. *Pulv. Sennæ Comp.*, E. *Potassæ Tartras*, U. S. —L. E. D.

POTASSÆ TARTRAS. U. S.—L. E. D. Tartrate of Potassa. (Formed by saturating the excess of acid of the bitartrate with carbonate of potassa.) *Kali Tartarizatum.*

Comp. Potash 42.1 per cent, tartaric acid 57.9 per cent.

Prop. Inodorous; taste bitter, disagreeable; generally in the form of a white granular powder; soluble in 4 parts of water at 60°; soluble in alcohol. Like the other vegetable salts of the alkalies, this is decomposed in the system, and converted into the carbonate, in which state it is found in the urine.

Oper. Purgative.
Use. To open the bowels in febrile diseases, mania, and hypochondriasis; and as an adjunct to senna, and the resinous purgatives in solution, the griping effects of which it corrects.
Dose. ʒj. to ℥j. in solution.
Incomp. Acids; infusion of tamarinds and other acid fruits; chloride of calcium; lime, magnesia, sulphates of soda, of potassa, and of magnesia; nitrate of silver, acetate of lead, and hydrochlorate of ammonia.

POTASSÆ ET SODÆ TARTRAS. U. S.—E. See *Sodæ Potassio-Tartras.*

POTASSII FERROCYANIDUM. L. E. *Potassii Ferrocyanuretum*, U. S. Ferrocyanide of Potassium.
Comp. 2 eq. cyanide of potassium=131.08+1 eq. cyanide of iron =54.39+3 eq. water=27, equivalent 212.47.
Oper As a sedative, an astringent, and a diuretic. Seldom used in this country.
Dose. From ♏xx. to ♏xl. of a solution of ʒij. of the salt in f℥j. of water.
Off. Prep *Acidum Hydrocyanicum Dilutum*, U. S.—L.

PRINOS. U. S. (*Secondary.*) *Black Alder.* Prinos *Verticillatus.* The Bark. (*Hexandria, Monogynia.* N. O. *Ilicineæ.* Big. *Med. Bot.* *Indigenous*)
Prop. No smell; taste bitter, slightly astringent; virtues extracted by boiling water.
Oper. Tonic, astringent, alterative.
Use. Intermittents, diarrhœa, gangrene, chronic cutaneous eruptions; locally in ill-conditioned ulcers.
Dose. Of the powder, from ʒss. to ʒj.; of the decoction, made by boiling ℥ij. of the bark with Oiij. of water to Oij., from ℥ij. to ℥iij.; or it may be given in tincture.

PRUNA. U. S.—L. E. Pruni Domesticæ Fructus, D. Prunes. (Prunus *Domestica.* *Octand.* *Trigyn.* N. O. *Amygdaleæ* South of Europe. ♄.)
Prop. Odor weak; taste sweet, acidulous.
Oper. Cooling, laxative, nutrient.
Use. In costiveness attended with heat and irritation, an article of diet in fever.
Off. Prep. *Confectio Sennæ*, U. S.—L. E. D.

PRUNI LAURO-CERASI FOLIA. E. D. Cherry Laurel Leaves. (Cerasus Lauro-Cerasus. *Icosandria, Monogynia.* N. O. *Amygdaleæ.* ♃.)
Comp. Amygdalin, resin, myricin, clorophylle, extractive, tannic acid, ligneous fibre, and water. By distillation, the leaves yield a volatile oil and a distilled water; the oil contains hydrocyanic acid, and hydruret of benzule. This oil is pale yellow, and heavier than water, attracts oxygen, and deposits benzoic acid.
Prop. Taste bitter; odor, when bruised, that of bitter almonds; contains hydrocyanic acid and an essential oil—hydruret of benzule.
Oper. Sedative, diuretic.
Use. In spasmodic coughs, and all affections in which hydrocyanic acid is useful.

PRUNUS VIRGINIANA. U. S. *Wild-Cherry Bark.* Willd. "Sp. Plant."

Comp. Volatile oil, hydrocyanic acid, starch, resin, tannin, gallic acid, fatty matter, lignin, red coloring matter, salts of lime, potassa, and iron.

Prop. In the fresh state, or when boiled in water, it emits an odor resembling peach leaves. Its taste is agreeably bitter and aromatic, with the flavor of the bitter almond. Imparts its virtues to water, cold or hot. Its peculiar flavor owing to a volatile oil which is dissipated by heat.

Oper. Tonic and sedative.

Use. In debilitated states of the stomach or general system, attended with irritation and nervous excitability. It allays the action of the heart, and is highly useful in the hectic fever of scrofula and consumption. In dyspepsia and intermittents.

Dose. In powder, from ʒ ss. to ʒ j. See *Infusum Pruni Virg.*

Off. Prep. *Infusum Pruni Virginianæ.*

PTEROCARPUS. L. E. D. Santalum, U. S. Red Sanders Wood. (Pterocarpus Santalinus. *Diadelph. Decand.* N. O. *Leguminosæ.* East Indies. ♄.)

Prop. Aromatic odor, nearly insipid; color bright deep red.

Use. As a coloring material.

PULEGIUM. E. See *Mentha Pulegium.*

PULVERES EFFERVESCENTES. E. Effervescing Powders. (*Tartaric Acid* ℥ j., *Bicarbonate of Soda* ℥ j. gr. 54; to be kept separately in powder; 1-16th of each to be dissolved and mixed.)

Use. In febrile affections.

PULVIS ALOËS CUM CANELLA. U. S.—D. Powder of Aloes with Canella. (*Aloes Hepaticæ* ℔ j., *Canellæ Albæ* ℥ iij. Rub them separately into a powder, and mix.)

Oper. Warm, cathartic.

Use. In costiveness, but not well adapted to be used as a powder.

Dose. Gr. x. to ℈ j.

PULVIS ALOËS COMPOSITUS. L. D. Compound Powder of Aloes. (*Aloes* ʒ jss., *Guaiaci Res.* ℥ j., *Pulv. Cinnam. Comp.* ℥ ss. Rub the aloes and guaiacum separately, then mix the whole.)

Oper. Warm, cathartic, stomachic, sudorific.

Use. In dyspepsia attended with a sluggish state of the bowels; spasmodic affections of the intestinal canal; jaundice; and obstinate costiveness.

Dose. Gr. x. to ℈ j.

PULVIS ALUMINIS COMPOSITUS. E. Compound Powder of Alum. (*Alum* ℥ iv., *Kino* ℥ j. Mix and powder.)

Prop. Astringent.

Use. The same as alum; and in chronic diarrhœa.

Dose. Gr. x. to ℈ j.

PULVIS ANTIMONII COMPOSITUS. L. Pulvis Antimonialis, E. D. Oxydum Antimonii cum Phosphate Calcis, E (*Antimonii Sesquisulphureti cont.* ℔ j., *Cornuum Rasorum* ℔ ij

Comp. Antimonious acid 56, phosphate of lime 44, in 100 parts.

Prop. Inodorous, insipid; in the form of a white powder; insoluble in water.

Oper. Intended to be diaphoretic and alterative; in large doses emetic, purgative; a very uncertain and useless preparation.

Use Intended to be used in febrile diseases, and every case to which diaphoresis can be useful; and in small doses in cutaneous diseases.

Dose. Gr. iij. to gr. viij. in pills, combined with opium or camphor, every six or eight hours, diluting freely in the intervals.*

PULVIS ASARI COMPOSITUS. E. D. Compound Powder of Asarabacca. (*Foliorum Asari Europæi partes tres, Fol. Origani Marjoranæ, Florum Lavand. Spicæ, sing. partem unam.*) Rub into a powder.

Oper. Errhine.

Use. In chronic headaches, serous apoplexy, and obstinate ophthalmia, avoiding exposure to cold.

Dose. Gr. v. to gr. viij. snuffed up the nostrils at bed-time.

PULVIS PRO CATAPLASMATE. D. Powder for a Poultice. (*Seminum Lini, quæ restant post oleum expressum,* partem unam. *Farinæ avenæ* partes duas. Mix.)

Use. In all cases requiring poultices; which are prepared with this powder by merely mixing it with boiling water.

PULVIS CINNAMOMI COMPOSITUS. L. Pulv. Aromaticus, E. D. Compound Powder of Cinnamon. (*Cinnam.* ℥ ij., *Cardamomi* ℥ jss., *Zingiberis Rad.* ℥ j., *Piperis Longi* ℥ ss. Rub them together to a very fine powder.)

Oper. Stimulant, carminative.

Use. In cold, decayed, phlegmatic habits, to assist digestion, and expel flatus; but chiefly used to give warmth to other compositions.

Dose. Gr. v. to gr. x. or more.

PULVIS CORNU CERVINI USTI. D. Powder of Burnt Hartshorn. (The hartshorn burnt and rubbed to powder.)

PULVIS OPIATUS. E. Powder of Burnt Hartshorn with Opium. (*Opii duri cont.* ʒ j., *Cornuum ustor. et præparatorum* ℥ j., *Coccorum cont.* ʒ j. Mix.) Gr. x. contain gr. j. of opium.

Oper. Anodyne.

Use. To procure sleep and allay pain. It is chiefly adapted for children, as the opium can thus be exhibited in small quantities.

Dose. Gr. j. to gr. x. or more.

PULVIS CRETÆ COMPOSITUS. L. E. D. Compound Powder of Chalk. (*Cretæ Prep.* ℔ss., *Cinnamomi* ℥ iv., *Tormentillæ, Acaciæ Gum., sing.* ℥ iij., *Piperitis Longi* ʒ iv. Reduce them separately into a fine powder, and mix.)

Oper. Antacid, stomachic, absorbent.

Use. In acidity of the stomach, and in the diarrhœa attendant on low fevers.

Dose. Gr. v. to ℈ jss. rubbed up with mucilage and cinnamon water.

PULVIS CRETÆ COMPOSITUS CUM OPIO. L. D. Pulvis Cretæ Opiatus, E. Compound Powder of Chalk with Opium. (*Pulv. Cretæ Comp.* ℥ vjss., *Opii duri cont.* ℈ iv. Mix.) Contains gr. j. of opium in gr. xl.

Oper. Anodyne, absorbent.

Use. In the same cases as the former. As an anodyne to children affected with irritative diarrhœa during dentition.

Dose. Gr. x. to ℈ ij. for adults.

PULVIS IPECACUANHÆ COMPOSITUS. L. E. D. Compound Powder of Ipecacuanha. (*Ipecacuanhæ cont., Opii duri cont., sing.* ʒ j., *Potassæ Sulphatis cont.* ℥ j. Mix.)

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* 100 grains have been given without producing any effect.

Oper. Diaphoretic.

Use In rheumatism, dropsy, gout, fevers, dysentery, and diabetes.

Dose. Gr. v. to ℈ j. in pills or bolus, diluting freely with tepid fluids, but not immediately, as they are apt to produce vomiting.

PULVIS JALAPÆ COMPOSITUS. U. S.—L. E. D. Compound Powder of Jalap. (*Jalapæ* ℥ iij., *Bitartratis Potassæ* ℥ vj., *Zingiberis* ʒ ij. Rub them separately to a fine powder, and then mix.)

Oper. Purgative.

Use. In costiveness, particularly of children with a tumid belly; in worm cases, and in dropsy.

Dose. ℈ j. to ℈ ij. for adults; gr. vj. to gr. xij. for children.

PULVIS KINO COMPOSITUS. L. D. Compound Powder of Kino. (*Kino* ʒ xv., *Cinnam.* ʒ iv., *Opii duri* ʒ j. Rub each separately to a fine powder, and then mix.) Gr. xx. contain gr. j. of opium.

Oper. Astringent.

Use. In chronic diarrhœa, leucorrhœa, and uterine and intestinal hæmorrhages.

Dose. Gr. v. to ℈ j. in aqueous fluids.

PULVIS RHEI COMPOSITUS. E. Compound Powder of Rhubarb. (*Magnesia* ℔ j., *Ginger in fine powder* ℥ ij., *Rhubarb in fine powder* ℥ iv. Mix.)

Oper. Purgative and antacid.

Use. In a dyspeptic state of the stomach, attended with acid eructations.

Dose. ʒ ss. to ℈ ij.

PULVIS SALINUS COMPOSITUS. D. E. Compound Saline Powder. (*Sodæ Muriatis purioris*, *Magnesiæ Sulphatis*, utriusque partes iv., *Potassæ Sulphatis* partes iij. First rub the dried salts separately into fine powder, then rub them together, and preserve the mixture in a closely-stopped bottle.)

Oper. Purgative, resolvent.

Use. In all cases in which sea water is ordered; externally applied in scrofulous tumors.

Dose. From ʒ iij. to ʒ vj. dissolved in a large quantity of water; for external use, a saturated solution.

PULVIS SCAMMŌNII COMPOSITUS. L. E. D. Compound Powder of Scammony. (*Scammonii, Ext. Jalapæ duri, sing* ℥ ij., *Zingiberis Rad.* ℥ ss. Rub each separately to a fine powder, and then mix.)

Oper. Cathartic.

Use. In hydropic and worm cases; and to remove mucous obstructions in children.

Dose. Gr. vj. to gr xx.

PULVIS SCILLÆ. Powder of Squills. (The bulb of *Scillæ Maritima* sliced, dried, and reduced to a powder.) It should be kept in well-stopped phials.

Oper. Diuretic, emetic, expectorant.

Use. In the same cases for which the squill pill is employed.

Dose. Gr. iij. to gr. vj. combined with soap, and other substances, in pills or bolus.

PULVIS SPONGÍÆ USTÆ. D. Powder of Burnt Sponge.

Oper. Deobstruent.
Use. In bronchocele and other scrofulous swellings.
Dose. ℈j. to ʒj. mixed in honey or treacle.

PULVIS STANNI. U. S.—D. Powder of Tin. (*Stanni purissimi* quantum velis. Melt the tin, and stir it briskly, until it changes into a powder, which, when cold, may be passed through a sieve.)
Oper. Mechanically anthelmintic.
Use. In worm cases, in which the tænia and lumbricus teres are to be dislodged.
Dose. From ʒj. to ʒij. in treacle, on an empty stomach, for several successive mornings, increasing the dose to ʒiij. or ʒiv. It should be followed by a purgative.

PULVIS TRAGACANTHÆ COMPOSITUS. L. E. Compound Powder of Tragacanth. (*Tragacanthæ cont.*, *Acaciæ cont.*, *Amyli, sing.* ℥jss., *Sacch. Pur.* ℥iij. Rub the starch and sugar together, then add the tragacanth and acacia gum, and mix. The starch might be omitted, as it is not soluble in cold water.)
Oper. Demulcent.
Use. In hectic fever; catarrh attended with tickling cough, combined with nitre, in gonorrhœa and strangury; and with ipecacuanha powder, in dysentery.
Dose. ʒss. to ʒiij. in distilled water or any bland fluid. Gr. x. render f℥ij. of fluid mucilaginous.

PYRETHRUM. U. S.—L. E. Anthemus Pyrethrum, radix, D Pellitory of Spain. (Anthemis *Pyrethrum*. *Class and Order of Anthemis Nobilis*. Arabia. ♂.)
Comp. An acrid matter (*pyrethrin*, on which its virtues depend), 3, inulin 25, gum 11, tannin 0.55, coloring matter 12, lignin 45, chloride of potassium 0.79, silica 0.85, a fixed oil, and iron a trace.
Prop. Inodorous; taste hot and acrid, its acrimony residing in a fixed oil; the dried root is more acrid than the recent.
Oper. Stimulant, sialogogue.
Use. Chewed, it excites a copious flow of saliva—hence it has been found useful in some affections of the head; in strumous swellings of the tonsils; toothache, and palsy of the muscles of the throat. It is also used in infusion as a gargle.

PYROLÆ UMBELLATÆ HERBÆ. D. Pyrola, E. Chimaphila Umbellata, U. S.—L. The Herbaceous part of Winter Green. Pipsissewa. (Chimaphila *Umbellata*. *Decandria, Monogyn.* N. O. *Pyrolaceæ*. North America. ♃.)
Comp. Bitter extractive 18, resin 2, tannin 1, woody fibre, gum, and salts of lime.
Prop. Bitter, slightly aromatic.
Oper. Astringent, tonic, diuretic.
Use. In affections of the kidney, and in dropsy.
Dose. Of a decoction, made with ℥j. of the dried herb and two pints of cold water, boiled down to one pint and strained, from fʒj. to f℥iij. three times a day.

QUASSIA. U. S.—L. E. D. Quassia Wood. (Picrana *excelsa*. *Decandria, Monogyn.* N. O. *Simarubiaceæ*. Jamaica. ♃.) The Wood
Comp. Volatile oil, a bitter principle, gummy extractive, pectin, woody fibre, and various salts.—(*Pfaff*.)

Prop. Inodorous, taste a very intense, durable bitter, color whitish yellow; has no astringency; bitter principle (or *Quassina*) extracted by water and alcohol.

Oper. Tonic, stomachic.

Use. In intermittents; bilious fever, combined with neutral salts; lienteria and cachexia; in hysteria, united with tincture of valerian; and with cretaceous powder and ginger in gout

Dose. Of the raspings, gr. v. to ʒ ss., but infusion and extract are preferable forms of exhibiting it.

Incomp. Nitrate of silver, acetate of lead.

Off. Prep. *Infusum Quassiæ*, U. S.—L.

QUERCUS CORTEX. L. E. Quercus Alba: Tinctoria, U. S. Quercus Robori; Cortex, D. Oak Bark. (Quercus *Pedunculata* Q. Robor. *Monœcia, Polyandria.* N. O. *Cupuliferæ.* Europe. ♄.)

Comp. Tannic acid; tannates of lime, magnesia, potassa, &c.; gallic acid, pectin, lignin, uncrystallizable sugar.—(*Braconnot.*) 480 pounds of oak bark yield from 20 to 72 pounds of tannin, (impure tannic acid.)—*Davy.*

Prop. Inodorous; taste austere, styptic; differs from galls in not precipitating solutions of tartar emetic.

Oper. Tonic, astringent.

Use. In intermittents, combined with galls, bitters, and aromatics; useful also in fluor albus, and alvine fluxes. See *Decoction.*

Dose. Of the powder, gr. x. to ʒ ss. twice or thrice a day. From the difficulty of pulverization, the infusion or decoction is the best form.

Off. Prep. *Decoctum Quercus*, L.

QUINIA. U. S.: QUINA. L. Quina. See *Cinchona.*

QUINÆ ACETAS. Acetate of Quinine. (Saturate quinine with concentrated acetic acid diluted with water, and evaporate the neutral solution by gentle heat to crystallization.)

Prop. Delicate, needle-shaped, snow-white crystals; taste very bitter; scarcely soluble in cold water, readily in hot.

Oper. The same as the other salts of quinine.

QUINÆ CITRAS. Citrate of Quinine. (Formed like the acetate, from an aqueous solution of citric acid and pure quinine, or by decomposing a hot solution of sulphate of quinine by an acid citrate of soda.)

Prop. Needle-shaped prisms, of a white color, scarcely soluble in water.

Oper. This preparation and the acetate are supposed to be better adapted to those excitable persons with whom the sulphate does not agree.

Dose. The same as the sulphate.

QUINÆ SULPHAS. U. S. Quinæ Disulphas, L. E. Disulphate of Quina. (Prepared from yellow cinchona.)

Comp. 2 eq. of quina=329.10+1 sulphuric acid=40.1+8 water =72, equiv.=441.20.

Prop. Crystals colorless, acicular, bitter, inodorous, effloresce in the air: 1 part requires 740 parts of cold water, 30 of boiling; 80 of cold alcohol for its solution; spec. grav. 850°. Apt to be adulterated with *mannite* and *gypsum*, which may be detected by adding pure alcohol, which dissolves the quinine, but leaves the other substances untouched.

Oper. Tonic.

Use. In *intermittents*, and all periodic diseases, as a tonic; also as a febrifuge in bilious remittents, and whenever tonics are indicated; may be used with great advantage endermically where the stomach is irritable.

Dose. Gr. ij. to gr. x. in any simple bitter infusion.

Incomp. Alkalies and their carbonates, lime-water, salts of baryta, lime, nitrate of silver, and salts of lead.

QUINÆ FERRO-CYANAS. Ferrocyanate of Quinine. (Decompose sulphate of quinine by means of a solution of ferrocyanate of potassa; then treat the impure salt with warm spirit of wine, and evaporate the clear solution.)

Prop. Needle-shaped, confused crystals, of a greenish-yellow color, and very bitter taste; soluble readily in alcohol, almost insoluble in water; decomposed by hot water.

Oper. A powerful tonic and antispasmodic.

Use. In intermittents, and where tonics are indicated.

Dose. Gr. ij. to gr. viij. in twenty-four hours, between the paroxysms in intermittents.

QUINÆ MURIAS. Muriate of Quinine. (Dissolve pure quinine in dilute muriatic acid, and evaporate.)

Prop. Fine, needle-shaped, white, silky crystals, of a pearly lustre, not very soluble in water.

Oper. A tonic, better adapted in cases of weak digestive powers than the sulphate; preferred by some to the sulphate in intermittents.

Dose. The same as the sulphate.

QUINÆ NITRAS. Nitrate of Quinine. (Add dilute nitric acid to a solution of quinine; or decompose nitrate of baryta by sulphate of quinine.)

Prop. At first a fluid, oily mass, gradually becoming solid, and forming crystals by union with water; scarcely soluble in water, but readily in alcohol.

QUINÆ PHOSPHAS. Phosphate of Quinine. (Prepared by adding dilute phosphoric acid to quinine, and evaporating; or phosphate of baryta to the sulphate of quinine.—*Phil. Jour. Pharm.*)

Prop Resembles the other salts of quinine; readily soluble in water and alcohol.

Oper. Ranked by some next to the sulphate in medicinal efficacy.

Dose. Same as sulphate.

QUINÆ ET CINCHONINÆ TANNAS. Tannate of Quinine and Cinchonine. (Very active preparations of the cinchonas, not yet introduced into practice in this country.—See *Dublin Jour. Med. Science*, *Sept.* 1836.

RANUNCULUS ACRIS. U. S. (*Secondary.*) FOLIA. D Leaves of Upright Meadow Crowfoot. *Polyandria, Polygynia.* N. O. *Ranunculaceæ.* Exotic ? ♃.)

Prop. Acrid, bitter.

Oper. Rubefacient, epispastic.

RANUNCULUS FLAMMULA. U. S. *Herba Recens*, L Recent Herbaceous part of Lesser Spearwort. (*Class and Order as above.*)

Prop. and *Oper.* The same as those of Ranunculus Acris.

Use. Both these species of ranunculus are occasionally employed as counter-irritants, and to cause vesication.

RESĪNA. U. S.—L. E. Yellow Resin (The residue, after the distillation of oil of turpentine.)

Comp. Pinic acid colophonic acid, sylvic acid, resin.

Oper. Stimulant.

Use. In the composition of plasters and ointments.

Off. Prep. *Emplast. Ceræ*, L. *Emplast. Hydrargyri*, U. S.—E. *Emplast. Cantharidis*, E. *Emplast. Belladonnæ*, U. S.—E. *Emp. Ferri*, U. S.—E. *Emp. Picis Compositum*, U. S.—L. E. *Emp. Resinæ*, U. S.—L. E. D. *Emp. Simplex*, E. *Ceratum Resinæ*, L. E. *Ung. Picis Aridæ*, L. *Ung. Infusi Meloes Vesicatorii*, E.

RESĪNA ALBĂ. D. E. White Resin. (Pinus Sylvestris. The Scotch Fir. ♄.) Exudes from wounds of the bark.

Prop. Little odor or taste; semi-transparent; insoluble in water; soluble in alcohol, in oils both fixed and volatile, and alkalies; pulverulent.

Oper. Stimulant, diuretic, rubefacient.

Use. Almost never employed internally; but chiefly to render more adhesive and stimulating various plasters.

RHAMNUS. L. D. Rhamni Baccæ, E. Buckthorn Berries. (Rhamnus *Catharticus*. Purging Buckthorn. *Pentandria, Monogynia.* N O. *Rhamnaceæ.* Indigenous. ♄.)

Comp. Coloring matter, acetic and malic acid, mucilage, sugar, bitter substance, (cathartine?)—*Vogel* and *Hubert.*

Prop. Odor faint and disagreeable; taste bitterish and nauseous; the size of a pea; have four seeds; the juice stains paper green.

Oper. Cathartic.

Use. In the same cases as jalap and senna, which are superior medicines. Their operation must be assisted with copious dilution, as they excite much thirst and griping.

Dose. Of the recent berries, gr. xx.; of the dried, ʒj. to ʒij.

Off. Prep. *Syrupus Rhamni*, L. E.

RHĒUM. U. S.—L. E. D. Rhubarb Root. (Rheum *Palmatum et Undulatum.* Palmated and Undulated Rhubarb. *Enneand. Monogyn.* N. O. *Polygonaceæ.* China. ♄.) The best comes through Russia in flat perforated pieces.

Comp. Extractive, volatile odorous matter, on which its virtues depend, oxalate of lime, tannic acid.

Prop. Odor aromatic, peculiar, rather nauseous; taste somewhat aromatic, subacrid, bitterish, astringent; feels gritty between the teeth; colors the saliva and urine saffron-yellow; not very mucilaginous. Pieces firm, but not flinty; external color a clear yellow; fracture rugged, veined yellow, red, and white; easily pulverized, forming a powder of a fine bright buff-yellow color. Both water and spirit extract its virtues.

Oper. Purgative, stomachic, astringent.

Use. In costiveness, from laxity of bowels, particularly of children; and diarrhœa. It is a useful adjunct to neutral salts and calomel, rendering their operation more easy. Externally the powder is sprinkled over ulcers, to assist their granulation and healing.

Dose. Gr. x. to ʒss. of the powder to open the bowels; gr. vj. to gr. x. to act as a stomachic.

Off. Prep. *Infusum Rhei*, U. S.—L. E. *Vinum Rhei*, U. S.—E. *Tinct. Rhei*, U. S—L. E. D. *Tinct Rhei Composita*, U. S.—

L. *Tinct. Rhei et Aloes*, U. S.—E *Tinct. Rhei et Gentianæ*, U. S.—E. *Tinct. Rhei et Sennæ*, U. S. *Pilula Rhei Composita*. U. S.—L. E.

RHŒAS. L. D. Rhœados Petala, E. Petals of the Red Poppy. (Papaver *Rhœas*. *Class and Order as Papaver Somniferum.* Exotic. ⊙.)

Use. Chiefly to impart their fine red color to syrup.

Off. Prep. *Syrupus Rhœados*, L. D.

RHUS GLABRUM. U. S. (*Secondary*.) *Sumach*. *Pentand. Trigynia.* N. O. *Anacardiaceæ*. Indigenous.) The Berries.

Prop. Bark and leaves astringent; berries have a sour, astringent, not unpleasant taste, owing to malic acid contained in the pubescence which covers them.

Oper. Astringent, refrigerant.

Use. Useful as a gargle in ulceration of the throat, and cooling drink in febrile complaints. An infusion of the inner bark of the root is highly useful in sore mouth attending salivation.

RICINI OLEUM. U. S.—L. E. Ricinis communis; Oleum e Seminibus Expressum, D. Castor Seeds and Oil. (Ricinus *Communis*, the Castor, or Palma Christi. *Monœcia*, *Monadelph.* N. O. *Euphorbiaceæ*. Indies. ⊙.)

Comp. Carbon 74, hydrogen 10, oxygen 15.—(*Ure.*) Fatty acids 94 (ricinic, elaiodic, margaritic acids), glycerine 8, palmin.

Prop. Seed inodorous; taste acrid, slightly sweetish; kernel white; oily, with a thin, dry cuticle; contained in a prickly, tricoccus capsule. Soluble in its own weight of alcohol.

Oper. Cathartic; sometimes emetic.

Use. For obtaining the oil. One or two of the seeds swallowed entire operate briskly; but are not used in this country. See *Oleum*.

Off. Prep. *Oleum Ricini*, U. S.—L.

ROCELLA TINCTORIA. Litmus, D. Dyer's Lichen. (*Cryptogamia Algæ*. N. O. *Algæ*. Portland Island. ♃.)

Use. For preparing litmus, which is chiefly employed as a dye-stuff, and a test of acids. It has been exhibited internally in phthisis pulmonalis.

ROSA CANINA. L. Rosæ Caninæ; Fructus, D. Dog Rose. or Hip Pulp. (*Icosandria*, *Polygynia*. N. O. *Rosaceæ*. Indigenous. ♄.)

Prop. Inodorous; taste sweet, acidulous, depending on the presence of uncombined citric acid and sugar.

Oper. Cooling.

Use. Vide *the Confection*.

Off. Prep. *Confectio Rosæ Caninæ*, U. S.—L.

ROSA CENTIFOLIA. U. S.—L. E. D. Damask Rose Petals. (*Class and Order as above*. Place unknown. ♄.)

Prop. Odor extremely fragrant; taste subacidulous.

Oper. Laxative.

Use. Scarcely used for any purpose, except for the distillation of rose-water, and the formation of a syrup.

Off. Prep. *Aqua Rosæ*, U. S.—L. E. D. *Syrupus Rosæ*, L. E *Ol. Rosæ*. U. S.

RÔSA GALLICA. U. S.—L. E. D. Petals of the Red Rose (*Class and Order as above*. Europe. ♄.)

Prop. Odor less fragrant than that of the damask rose; taste bitterish, astringent.

Oper. Astringent, tonic.
Use. See the preparations of it.
Of. Prep. *Confectio Rosæ*, L. E. D. *Infusum Rosæ*, L. E. D. *Mel Rosæ*, L. D. *Syrupus Rosæ*, E.

ROSÆ OLEUM. U. S.—E. Attar of Roses. (Volatile oil of Rosæ *centifoliæ*.)
Use. A scent.

ROSMARÍNUS. U. S.—L. E. Rosmarinus; Herba, D. Rosemary. (*Diandria, Monogynia.* N. O. *Labiatæ.* South of Europe. ♃.)
Prop. Odor fragrant, grateful; taste aromatic, warm, bitterish; depending on an essential oil, combined with camphor.
Oper. Tonic, stimulant, emmenagogue, resolvent.
Use. In nervous headaches, and in chlorosis, under the form of infusion; but it is now scarcely ever used, unless as an adjunct, to give odor to sternutatory powders.
Dose. Of the powders, gr. x. to ʒss.
Of. Prep. *Oleum Rosmarini*, L. E. D. *Spiritus Rosmarini*, L. E. D.

RUBIA. U. S.: RUBÍÆ RADIX. D. Root of Madder. (*Tetrand. Monogyn.* N. O. *Rubiaceæ.* Montpelier. ♃.)
Prop. Almost inodorous; taste bitterish, austere; color red; imparted to water, alcohol, and essential oils.
Oper. Emmenagogue, astringent.
Use. In chlorosis, and difficult or scanty menstruation; in the atrophia infantum; but its efficacy is very doubtful.
Dose. Gr. xv. to ℈j. united with sulphate of potassa, three or four times a day.

RUBUS TRIVÍALIS. VILLOSUS. U. S. (*Secondary.*) *Dewberry Root. Blackberry Root.* (*Icosandria, Polygynia* N. O. *Rosaceæ. Indigenous.*)
Prop. The roots only officinal. Inodorous; bitter, astringent taste; contains much *tannin;* virtues reside chiefly in the bark, and extracted by boiling water and diluted alcohol.
Oper. Astringent and tonic.
Use In diarrhœa from debility, cholera infantum, chronic dysentery. In all cases where astringents are indicated.
Dose. Of the decoction (℥j., Ojss. water; boiled to Oj.), from f℥j. to f℥ij. three or four times a day. Of the powdered root, gr. xx. to gr. xxx.

RUMEX. See *Acetosa Folia.*

RUMEX AQUATICUS. Radix. D. R. Britannicus, obtusifolius. U. S. (Secondary.) Root of the Water Dock. (*Hexandria, Trigynia.* N. O. *Polygonaceæ.* Indigenous. ♃.)
Prop. Bitterish, slightly acidulous.
Oper Purgative.
Use. In some cutaneous affections.
Dose. Of a decoction of ℥j. of the dried root, in Oj. of water, f℥ij. twice or thrice a day.

RŪTA. U. S.—L. E. D. The Leaves of Rue. (*Decandria, Monogyn.* N. O. *Rutaceæ.* South of Europe. ♃.)
Prop. Odor strong, ungrateful, taste bitter, pungent; acrid, so as to blister the skin; contains a volatile oil.
Oper. Tonic, stimulant, antispasmodic, emmenagogue?
Use. In hysteria and flatulent colic; but chiefly in the form of strong infusion in clysters, in the convulsions of children.

Dose. Gr. xv. to ℈ij.

Of. Prep. *Oleum Rutæ*, E. D. *Extractum Rutæ Graveolentis*, E. D.

RUTÆ OLEUM. See *Oleum Rutæ.*

SABADILLA. U. S.—L. E. Sabadilla Seeds. (Helonias *Officinalis.* *Asagrea Officinalis.* *Polygamia, Monœcia.* N O. *Melanthaceæ.* Mexico.)

Prop. Seeds elongated, pointed, inodorous; taste bitter, acrid; (in small capsules, three together.)

Comp. Gallate of veratria, cevadic acid, elaine, stearine, wax.

Oper. Cathartic, excitant, anthelmintic.

Use. Seldom internally; used in the form of powder to destroy pediculi. (Recommended by Turnbull in painful rheumatic and neuralgic affections.)

Dose. Gr. 1-6th of the *Extract*, gr. ij. to gr. vi. of the powder. *Tincture* used externally.

Of. Prep. *Veratria*, L. E.

SABBATIA. U. S. (*Secondary.*) S. *Angularis.* *Herba.* (*Pent. Monogynia.* N. O. *Gentianeæ.* *Indig.*)

Prop. Bitter, without astringency; virtues extracted by water and alcohol.

Oper. Tonic.

Use. In intermittent and remittent fevers, also as a prophylactic. Dyspepsia and general debility.

Dose. Of the infusion (℥j., water Oj.), f℥ij. frequently. Of the powder, ʒss. to ʒj. The Extract and Tincture are also useful.

SABINA. U. S.—L. E. D. Savine Leaves. (Juniperus *Sabina.* *Class and Order the same as Juniperus Communis.* Siberia. ♃.)

Comp. Volatile oil, resin, gallic acid, clorophylle, extractive, lignin, salts of lime.

Prop. Odor strong, disagreeable; taste hot, acrid, bitter; depending on an essential oil.

Oper. Stimulant, diaphoretic, emmenagogue, anthelmintic, escharotic.

Use. In amenorrhœa, with a languid pulse, but they require to be cautiously administered; in worms, rheumatism, and gout. Externally, the powder is applied to old ulcers, carious bones, &c.; and the infusion, as a lotion, to gangrene, scabies, and tinea capitis.

Dose. Gr. v. to gr. x. of the powder.

Of. Prep. *Ol. Volatile Juniperi Sabinæ*, E. D. *Ol. Sabinæ*, U. S. *Extractum Sabinæ*, D. *Ceratum Sabinæ*, U. S.—L.

SACCHARI FÆX. L. E. Treacle.

SACCHARUM. U. S.—L. D. Saccharum Commune—S. Purum, E. Sugar (Saccharum *Officinarum.* The Sugar Cane. (*Triand. Monogyn.* N. O. *Graminaceæ.* Egypt. ♃.)

Comp. Oxygen 50.8, carbon 42.85, hydrogen 6.35, parts=100.0.

Prop. In its pure state it is inodorous; taste perfectly sweet, of a brilliant white color, hard; when impure it has a peculiar taste and flavor, arising from extract, mucilage, and oil; in shining grains of a yellow color. Sugar is soluble in its own weight of water at 60°; also in alcohol: it is decomposed by the strong acids, but unites with lime and alkalies; boiled with water it forms a syrup.

Oper. Nutritive; the impure is laxative; externally, the refined is escharotic.

Use. Seldom given internally with a medical intention, unless to conceal the unpleasant taste of some medicines. It is said to be a preventive of worms. Externally it is applied to fungous ulcers. Hurtful to bilious and hypochondriacal habits and dyspeptics.

Off. Prep *Syrupi Omnes*, U. S.—L. E. D.

SAGAPENUM. L E. D. Sagapenum. (Plant unknown, supposed to be the *Ferula Persica*, (*Willd.*) Brought to Alexandria.)

Comp. Gum, resin, volatile oil.

Prop. Odor fetid, alliaceous; taste pungent, bitterish, nauseous, in small, agglutinated masses of a yellow color; tenacious, breaking with a horny fracture.

Oper. Antispasmodic, emmenagogue.

Use. In hysteria, chlorosis, and the same cases for which assafœtida is given, but to which it is inferior.

Dose. Gr. x. to ʒss. in pills.

Off. Prep. *Pilulæ Galbani Compositæ*, U. S.—L. *Pilulæ Sagapeni Compositæ*, L.

SAGO. U. S.—L. E. Sago. (*Sagus Rumphii.*) A modification of starch, containing traces of chloride of sodium.

SALĬCIS CORTEX. E. Salix; U. S. Cortex. Salix Fragilis; Cortex, D. Willow Bark. (Salix *Caprea*, Great Round-leaved Willow; Salix *Alba*, U. S. The White Willow; Salix *Fragilis*, the Crack Willow. *Diœcia, Diandria.* N. O. *Salicaceæ.* Europe. ♄.)

Comp. Bitter, yellow coloring matter, green fatty matter, tannin, resinous extract, gum, wax, woody fibre, and a magnesian salt.

Prop. Odor slightly aromatic; taste bitter and astringent. The active principle is an alkaloid named *salicina*, a compound of 2 eq. carbon=12.24+2 hydrogen=2+1 oxygen=8, equiv.=22.24. (All the species are nearly the same.)

Oper. Tonic, astringent.

Use. In intermittents and remittents; debilities of the intestinal canal; convalescence; and in hectic and phthisis.

Dose. ℈j. to ʒj. of the powder; or f℥jss. of the decoction, made with ℥ij. of the bark, in Oij. water, boiled down to Oj.

Incomp. Solution of isinglass, alkaline carbonates, lime-water sulphate of iron.

SALĬCINA. Salicine. (Boil willow bark with caustic lime in water; filter the decoction; add sulphate of zinc, as long as it produces a precipitate: filter again, and evaporate to the consistence of an extract, and heat the residue with alcohol Then carefully evaporate, and crystals of salicine will be deposited, which may be purified by washing with a saturated solution of the same principle in cold water.—*Jour. Phil. College Phar.* vol. 3, p. 214.)

Prop. Fine silky white crystals, like sulph. quinine, permanent in the air, inodorous; strong, bitter taste; six parts are soluble in one hundred parts cold water. More soluble in warm water and alcohol; becomes red by mixing with sulphuric acid.

Oper. Tonic

Use. In intermittents, and in all cases where tonics are indiuated. Its effects are analogous to those of quinine, but not much used.

Dose. Gr. iv. to gr. vi. every three hours in intermittents. In other cases, gr. j. to gr. iij. three or four times a day.

SAMBUCUS. U. S. (*Secondary.*) L. E. Sambuci Nigræ *Flores*, *Baccæ*, *Cortex*, D. Common Elder Flowers, Berries, and Bark. (*Pentand.* *Trigyn.* N. O. *Caprifoliaceæ.* Germany. ♃.)

Prop. Odor of the flowers sickly; of the fruit the same, but weaker; bark inodorous; taste of the flowers bitterish; the fruit sweetish, slightly acidulous, arising from malic acid; the bark at first sweetish, then bitter, acrid, nauseous.

Oper. Flowers diaphoretic, discutient; berries aperient, sudorific, bark purgative, hydragogue, deobstruent in small doses.

Use. The flowers in fomentations, to yield their flavor to water in distillation, and to form a cooling ointment; the berries, or their expressed juice, in febrile diseases, rheumatism, arthritic cases, and the exanthemata; the bark in dropsy and hæmorrhoids.

Dose. Of the juice of the berries f ℥ j. to f ℥ ij.; of the bark, gr. v. to ʒ ss. three times a day.

Of. Prep. *Succus Spiss. Sambuci Nigræ*, D. *Unguentum Sambuci*, L. D.

SANGUINARIA. U. S. *S. Canadensis.* Blood Root. The Root. (*Polyandria*, *Monogynia*, N. O. *Papaveraceæ.* *Indigenous.*)

Prop. Powder of the root brownish orange red; has a faint, narcotic odor; bitterish, acrid taste; yields its virtues to water and alcohol. Contains a peculiar alkaline principle, called *sanguarina*, to which it owes its red color and acrid properties

Oper. An acrid emetic; stimulant, narcotic, diaphoretic, alterative.

Use. It is principally used in chronic catarrh, bronchial affections, and pertussis. Combined with antimony or ipecacuanha, it is a useful expectorant.

Dose. As emetic, from gr. x. to gr. xx.; as an alterative, gr. j. to gr. iv. Of the tincture, x. to xxx. drops. This is the best form of administration.

Of. Prep. *Tinct. Sanguinariæ*, U. S.

SAPO. U. S.—L. Sapo Durus, E. D. Hard Soap.

Comp. Recent oil 60.94, soda 8.56, water 30.50, in 100 parts.

Prop. Inodorous; taste alkalescent, nauseous; hard, white, soluble in water and in alcohol.

Oper. Purgative, diuretic; externally detergent, stimulant.

Use. In habitual costiveness and jaundice, in pills, combined with rhubarb, or some bitter extract; but it is more useful externally to bruises and sprains. We have found much advantage from rubbing the bowels of children, in mesenteric fever attended with tumid bellies, with a strong lather of soap every morning.

Dose Gr. v. to ʒ ss. pills.

Incomp. Acids, earths, metallic salts, and alum; astringent vegetables and hard water decompose solutions of soap.

Of. Prep. *Pilula Saponis cum Opio*, U. S.—L. *Emplastrum Saponis*, U. S.—L. E. *Ceratum Saponis*, U. S.—L. *Linimentum Saponis*, L. *Lin. Saponis Comp.*, U. S.—E.

SAPO MOLLIS. L. E. D. Soft Soap. (Prepared by boiling oil with caustic potassa.)

Prop. Consistence of hog's lard; other properties the same as the hard.

Oper and *Use.* As the hard; but scarcely ever given as an internal remedy. Employed in Germany in the treatment of itch, smearing the body with it night and morning, for six days; then using a tepid bath of soap and water, and repeating the application afterwards to the parts affected, if necessary. During the time of treatment, the patient must remain in bed, avoid exposure to draughts of air, and keep the temperature of the room at from 73° to 77° Fah. This mode of treatment is said to be as successful as that by sulphur.

SARZA. L. E. Sarsaparillæ Radix, D. Sarsaparilla, U. S. (Smilax *Officinalis. Diœcia, Hexand.* N. O. *Smilacaceæ.* Virginia. ♄.)

Comp. Starch, woody fibre, resin extractive, albumen, a volatile oil, a crystalline matter (*parallinic acid*), gum, bassorin, smilacin; albumen, gluten lactic and acetic acids, salts; 100 lbs. sarsaparilla yield ℥j. volatile oil. The active properties of sarsaparilla are probably chiefly owing to the smilacin, resin, starch, and extractive.

Prop. Inodorous; taste bitterish, feculacious; fibrous; of a brownish color externally, white within.

Oper. Diuretic, demulcent.

Use. In the sequelæ of syphilis, when, after a mercurial course, nocturnal pains, enlargements of the joints, and cutaneous ulcerations remain; in scrofula; elephantiasis, or cutaneous affections resembling it; chronic rheumatism; and whenever an alterative is indicated.

Dose. From ℈j. to ʒj. of the powder, or made into an electuary, three times a day. See *Decoction, Syrup,* and *Ext.*

Off. Prep. *Decoctum Sarzæ,* U. S.—L. E. D. *Decoctum Sarzæ Comp.,* U. S.—L. E. D. *Extractum Sarzæ,* U. S.—L.

SASSAFRAS. U. S.—L. E. D. Lauri Sassafras. *Lignum Radix,* E. *Sassafras, Medulla et Cortex Radicis,* U. S. Sassafras Wood and Root. (*Class and Order, vide Lauri Baccæ.* Virginia. ♃.)

Prop. Odor not unlike that of fennel; taste aromatic, subacrid, sweetish; depending on a volatile oil.

Oper. Stimulant, sudorific, diuretic.

Use. In cutaneous diseases; chronic rheumatism; and as an adjunct to the decoctions of guaiac, &c.

Dose. See *Decoction.*

Off. Prep. *Ol. Sassafras,* U. S.—E. D.

SCAMMONIUM. U. S.—L. E. Gummi Resina Scammonii, D. Scammony. (*Class and Order as Jalapa.* Mexico. ♄.) The best comes from Aleppo.

Comp. Chiefly resin, gum extractive, starch, and woody fibre, salts of lime and magnesia; resin 11 parts, gummy extract 3½.

Prop. Odor trifling, but unpleasant; taste bitter, acrid, in blackish grey fragments, becoming whitish yellow when touched with wet fingers; fracture shining. The decoction, filtered and cooled, should not be rendered blue by iodine.

Oper. Drastic, purgative, hydragogue.

Use. In obstinate costiveness, worms, dropsy, in combination with some other cathartic, as aloes, rhubarb, calomel, &c.

Dose. Gr. iii. to gr. xv. triturated with sugar or with almonds.

Off. Prep. *Extractum Colocynth. Comp.*, U. S. *Confectio Scammonii*, L. D. *Pulvis Scam. Comp.*, L. E.

SCILLA. U. S.—L. E. Scillæ Maritimæ, Bulbus, D. The Bulb of the Squill. (Scilla *Maritima. Hexand. Monogynia.* N. O. *Liliaceæ.* Austria. ♃.)

Comp. *Scillitin*, tannin, gum, woody fibre, bitter extractive, fatty matter, phosphate of lime.

Prop. Inodorous; taste bitter, nauseous, extremely acrid; inflames the skin when rubbed on it; the bulb is large and lamellated. The acrimony, on which its virtue depends, is destroyed by heat, drying, and keeping; extracted by vinegar, spirit, and water.

Oper. Emetic in large doses: purgative; in small doses expectorant and diuretic. It owes its properties to a peculiar principle, which has been named *scillitina.*

Use. In pulmonary complaints, after the inflammatory action is reduced; humoral asthma; pertussis; in dropsy; and more useful if combined with a mercurial.

Dose. Gr. j. to gr. v. of the dried root, powdered, and united with the nitre of ipecacuanha; or in pills, to produce diuresis, united with the blue pill.

Incomp. Gelatin, lime-water, alkaline carbonates, acetates of lead, nitrate of silver.

Off. Prep. *Acetum Scillæ*, U. S.—L. E. D. *Oxymel Scillæ*, L. D. *Pilulæ Scillæ Comp.*, U. S.—L. E. D. *Pulv. Scillæ*, E. D. *Syrupus Scillæ*, U. S.—E. *Tinct. Scillæ*, U. S.—L. E. D.

⁂ *To dry the squill it should be cut transversely, and the dried sections kept in an opaque stopped bottle.*

SCOPARIUS. U. S.—L. E. D. Broom Tops. (Cytissus *Scoparius. Diadelph. Decand.* N. O. *Leguminosæ.* South of Europe. ♄.; *Genistæ Cacumina.*

Prop. Almost inodorous; taste bitter.

Oper. Diuretic.

Use. In dropsies.

Dose. ℈j. to ʒj. of the powder.

Off. Prep. *Decoctum Scoparii Comp.*, L. *Extract. Cacuminum Genistæ*, D.

SCROPHULĀRIA NODOSA HERBA D. Knotty Rooted Figwort. (Scrophularia *Nodosa. Didynam. Angiospermia.* N. O. *Scrophulariaceæ.* Indigenous. ♃.)

Prop. Odor disagreeable; taste acrid; becomes almost inert by drying.

Oper. Externally anodyne, repellant.

Use. As a fomentation in hæmorrhoids.

SECALE. See *Ergota.*

SENĔGA. U. S.—L. E. D. Senega Root. (Polygala *Senega*, U. S. *Diadelph. Octand.* N. O. *Polygalaceæ.* Virginia. ♃.) The bark is the active part of the root.

Comp. Extractive, polygalic and pectic acid, Virginic acid woody fibre, volatile oil, resin, gum; albumen, and various salts. Owes its virtues to polygalic acid.

Prop. Inodorous; taste sweetish at first, then acrid, hot, and pungent: *depending on a resin*; extracted by alcohol and [illegible]

Oper. Stimulant, expectorant, diaphoretic, diuretic

Use. In peripneumonia, after the inflammatory action is reduced humoral asthma, chronic rheumatism; dropsy; croup? The extract of it, with carbonate of ammonia, has been found useful in lethargy.

Dose. Gr. xxx. to ℈ij. of the powder, Madeira wine, if it can be ordered, covers the taste of the powder.

Off. Prep. *Decoctum Senegæ*, L. E.

SENNÆ FOLIA. U. S.—L. Senna Alexandrina, E. D. Senna Leaves. (Cassia *lanceolata et obovata*. *For Class and Order, see Cassia Pulpa.* Egypt. ⊙.)

Comp. Cathartin, yellow coloring matter, volatile oils, fixed oil, albumen, mucus, malic acid, salts of lime, potassa, and insoluble matter.

Prop. Odor faint; taste bitterish; active part extracted by alcohol, and by water; its activity destroyed by boiling water.

Oper. Cathartic, hydragogue. (It is apt to gripe.)

Use. In costiveness and dropsy; should always be given with aromatic and saline substances.

Dose. Of the powder, ℈j. to ʒj rubbed with crystals of bitartrate of potassa, and united with ginger to prevent griping; but the best form is that of infusion.

The *Fluid Extract* is the best preparation of senna. (℞ ℔xv. pure senna; exhaust with four times its weight of water by displacement; concentrate *in vacuo* to ℔x.; dissolve in the product ℔vj. treacle, previously concentrated over the vapor bath, till a little of it becomes nearly dry on cooling; add f℥xxiv rectified spirit (dens. .835), and, if necessary, water to make xv. pints (℥xvi.) Dose ʒij. for an adult. It rarely gripes, and has no unpleasant taste.)—*Phar. Journ.*

Adulterations. Leaves of Cynanchum *Oleafolium*, or *Argel.* The leaves of Box, Colutea *Arborescens*, and *Conyaria Myrtifolia.*

Off. Prep. *Confectio Sennæ*, U. S.—L. E. D. *Infusum Sennæ*, U. S.—L. E. *Infusum Sennæ Comp.*, L. D. *Infusum Tamarindi cum Senna*, E. D. *Tinct. Rhei et Sennæ*, U. S. *Tinctura Sennæ et Jalapæ*, U. S. *Tinct. Sennæ*, L. E. D. *Syrupus Sennæ*, D. E.

SENNA INDICA. E. East India Senna. (Cassia *elongata*. India.)

Prop. and *Use.* The same as Alexandrian senna.

SERPENTÂRIÆ RADIX. U. S.—L. E. Aristolochiæ Serpentariæ Radix, D. Snake Root. (*Gynand. Hexand.* N. O. *Aristolochiaceæ.* Virginia. ♃.) *Serpentaria Virginiana.*

Comp. Volatile oil, lignin, extractive, resin, starch, albumen, salts of lime.

Prop. Odor aromatic, similar to that of valerian; taste pungent, bitter; fibrous; its active part extracted partially only by water; altogether by proof spirit.

Oper. Stimulant, diaphoretic, diuretic.

Use. In typhoid fevers, and diseases of debility; to assist cinchona in the cure of intermittents; in the exanthemata, and dyspepsia; and externally as a gargle in cynanche maligna.

Dose. Of the powder, gr. x. to ʒss.; or of the following infusion f℥ss. every four hours;—℞ Rad. contusi Serpentariæ ʒiv., Aquæ ferv. f℥xij. Macerate, in a covered vessel, for two hours.

Off. Prep. *Tinctura Serpentariæ*, U. S—L. E. D. *Tinctura Cinchonæ C.*, U. S.—L. E. D.

SESAMUM. U. S. (*Secondary.*) *Benne.* Sesamum *Orientale.* Folia. The *Leaves.* *Oleum Sesami*, U. S. (*Sec.*) Benne Oil. (*Didynamia, Angiospermia.* N. O. *Pedalineæ.* Exotic.)

Prop. The leaves abound in a gummy matter, which is readily imparted to water, forming a bland mucilage. The oil is inodorous, of a bland, sweetish taste, bearing considerable resemblance to olive oil, and used for similar purposes; used as food in the East, and as an external application.

Oper. *Laxative*, demulcent, nutritious.

Use As a drink in cholera infantum, diarrhœa, dysentery, catarrh, and affections of the urinary passages.

Dose. One or two green leaves in a tumbler of cool water will render it sufficiently viscid.

SEVUM. U. S.—L. Adeps Ovilli, E. D. Mutton Suet. (Ovis *Aries*, the Sheep. Cl. *Mammalia;* Ord. *Ruminantia.*)

SEVUM PRÆPARATUM. L. E. Adeps Ovillus Præparatus D. Prepared Suet. (Cut the suet in pieces, melt it over a slow fire, and strain it through linen.) *Ovilli Sevum Præparatum.*

Comp. Stearin, elaine, margarin, hircin; carbon 78.9, hydrogen 11.7, oxygen 0.304.

Oper. Emollient, demulcent, nutritious.

Use. It is sometimes boiled in milk, in the proportion of ℥ij. to Oj. of milk; and a cupful given occasionally in chronic diarrhœa; but its principal use is to give consistence to ointments and plasters.

Off. Prep. *Emplastrum Ceræ*, U. S.—L. E. *Emplast. Meloes Vesicatorii*, E. *Unguent. Hydrargyri Fort.*, U. S.—L. E. D. *Ung. Picis Liquidæ*, U. S.—L. D. *Ung. Sambuci*, D.

SIMARUBA. U. S.—L. E. D. The Bark and Wood of Simarouba. (Simaruba *Officinalis.* *Class and Order of Quassia.* Jamaica. ♄.)

Comp. Quassin, resin, volatile oil, woody fibre, ulmin, an ammoniacal salt, mucilage, malic acid, salts of lime, silica, iron, &c.

Prop. The bark is inodorous; taste bitter, not unpleasant; texture fibrous; yellowish on the inside, darker on the outside, scaly and warty. Both water and alcohol extract its virtues. It possesses no astringency.

Oper. Tonic.

Use. In dysentery, chronic diarrhœa, lienteria, and dyspepsia.

Dose. ʒss. to ʒj. of the powder; but the infusion is a better form of exhibiting this remedy.

Off. Prep. *Infusum Simaroubæ*, L.

SINAPIS. U. S.—L. E. Sinapis Semina, D. Mustard Seed Sinapis Nigra et Alba, Common and White Mustard. (*Tetradynam. Siliquosa.* N. O. *Cruciferæ.* Europe. ⊙.)

Comp. Acrid volatile oil, yellow fatty oil, resin, extractive, gum, woody fibre, albumen, free phosphoric acid, salts.—*John.*

Prop. Inodorous when entire, but when bruised, and the oil pressed out, the odor developed by water is very pungent; taste bitterish, acrid; properties yielded to water; the seeds give out a bland oil by expression.

Oper. Stimulant, diuretic, emetic, rubefacient, laxative.

Use. In dyspepsia; a torpid state of the bowels; and chlorosis The seed is swallowed entire, or only slightly crushed; a strong infusion of the flour is used to produce vomiting in apoplexy and paralysis; externally, the flour is applied as a cataplasm to the legs and the soles of the feet in typhus, and comatose affections.

Dose. ʒj. to ʒss.; or f℥ij. of the following infusion. ℞ Sinapis pulveris, Armoraciæ rad., sing. ℥ij., Aq. ferventis Oij. Infuse in a covered vessel for twelve hours; then strain and add spir. menthæ piper. f℥ij.

Off. Prep. *Cataplasma Sinapis*, L. D.

SODÆ ACETAS. U. S.—L. D. Acetate of Soda. (The crystals are to be preserved in stopped bottles.) *Striated prismatic crystals.*

Comp. Acetic acid 36.95, soda 22.94, water 40.11, in 100 parts; or 1 eq. acid=51.48+1 soda 31.3+6 water=54, equiv.=136.78.

Prop. Taste sharp, bitterish, soluble in 2.86 parts of water at 60°, spec. grav. 2.1, effloresces in heat, but not in the air; melts in a high temperature; little soluble in alcohol.

Oper. Purgative, refrigerant.

Use. In cases requiring a mild purgative. Chiefly used for making acetic acid.

Dose. From ʒj. to ʒiv. in any bland fluid.

Incomp. Carbonate of lime, sulphuric, nitric, and hydrochloric acids.

SODÆ BORAS. U. S.—D. *Borate of Soda.* Sodæ Sub-Boras, L. Sub-Boras Sodæ. *Borax.*

Prop. A white salt; in crystals of flattened hexahedral prisms; sweetish alkaline taste; dissolves in twelve times its weight of cold, and twice its weight of boiling water. Effervesces on exposure to the air; has the property of rendering *Cream of Tartar* very soluble.

Comp. 2 equiv. of boracic acid 69.8, and 1 of soda, 31.3=101.1—10 or 5 equiv. of water, according to the form of its crystals.

Oper. Diuretic, emmenagogue.

Use. In nephritic and calculous complaints, depending on an excess of uric acid. As a detergent in aphthous affections of the mouth in children, rubbed up in sugar in the proportion of 1 to 7, or rubbed with honey.

Dose. From gr. xxx. to gr xl.; or combined with cream of tartar.

SODÆ CARBONAS IMPURA. L. E. Sodæ Carbonas, venale, Barilla, D. Impure Carbonate of Soda. (Prepared by nature in Egypt: artificially from the incineration of marine plants; and the decomposition of chloride of sodium.)

Comp. Carbonate of soda, potassa, and chloride of sodium; clay, and other earthy substances.

Use. For preparing the pure carbonate.

Off. Prep. *Carbonas Sodæ*, L. E. D.

SODÆ CARBONAS. U. S.—L. E. D. Carbonate of Soda (The impure carbonate dissolved in water: the solution strained and crystallized.)

Comp. Soda 20.92, carbonic acid 14.38, water of crystallization 64.7 parts; or 1 eq. of soda=31.3+1 acid=22.12+10 water=90, equiv.=143.42.

Prop. Inodorous; taste alkaline, but not acrid, crystals oblique, octahedrous, efflorescent, requiring for their solution two parts of water at 60°; they undergo the watery fusion when exposed to heat.

Oper. Antacid, deobstruent.

Use. In dyspepsia, and acidities of the stomach, united with bitters; in uric acid gravel, in hooping-cough, bronchocele, and in scrofulous affections.

Dose. Gr. x. to ʒss. twice or thrice a day.

Incomp. Lime; acids, unless as an effervescing draught: hydrochlorate of ammonia, earthy and metallic salts.

Off. Prep. *Sodæ Sesquicarbonatis*, L. D. *Sodæ Carbonas Exsiccata*, U. S.—L. E. D. *Sodæ Potassio-Tartras*, U. S.—L. *Sodæ Sulphas*, U. S.—L. *Ferri Sesquioxydum*, L. *Pilulæ Ferri Compositæ*, U. S.—L. *Magnesiæ Carbonas*, U. S.—L. *Liquor Sodæ Chlorinatæ*, U. S. *Sodæ Phosphas*, U. S.

SODÆ CARBONAS EXSICCATA. U. S.—L. Sodæ Carbonas Siccatum, E. D. Dried Carbonate of Soda. (The carbonate made to undergo the watery fusion; and, when dry, reduced to powder.)

Comp. Soda 59.86, carbonic acid 40.14 parts; or 1 eq. soda=31.3 +1 acid=22.12, equiv.=53.42.

Oper. Antacid, lithontriptic.

Use. In acidity of the stomach; but chiefly in calculus in the kidneys, and other affections of the urinary organs.

Dose. Gr. v. to gr. xv. made into pills, with some aromatic powder and soap.

SODÆ PHOSPHAS. U. S.—L. E. Phosphate of Soda. See *Phosphas Sodæ.*

SODÆ SESQUICARBONAS. L. Sodæ Bicarbonas, U. S.—E. D. Sesquicarbonate of Soda. (*Sodæ Carbonatis* ℔vij., *Aq. Distil.* cong. j.) Dissolve the carbonate of soda, and pass carbonic acid through the solution; then set the solution aside to crystallize. Dry the crystals in bibulous paper, and then by moderate heat.

Comp. Soda 38.55, carbonic acid 39.76, water of crystallization 21.69 parts; or 1 eq. soda=31.3+1 acid=22.12+1 water=9, equiv.=84.54.

Prop. In minute crystals; less alkaline to the taste than the carbonate. A solution in 40 parts of water does not precipitate corrosive sublimate of an orange color.

Oper. and *Use.* The same as that of the carbonate.

Dose. Gr. x. to ʒss.

SODÆ CARBONATIS AQUA. D. Sodæ Aqua Effervescens, E. Water of Carbonate of Soda. (*Sodæ Carbonatis quantum volis.* Dissolve it in distilled water, and evaporate the solution to the spec. grav. 1024. A solution of the same specific gravity may be made by dissolving an ounce of carbonate of soda in a pint of distilled water.)

Prop. and *Use.* The same as those of the solid salt.

SODÆ MURIAS. E. D. Muriate of Soda. See *Sodii Chloridum.*

Use. For preparing the exsiccated salt.

SODII CHLORIDUM. U. S.—L. Sodæ Murias Purum, E Chloride of Sodium. Muriate of Soda, or Sea Salt. (In an impure state this is one of the most abundant productions of nature.

Comp. Soda 54.26, hydrochloric acid 45.74.—(*Berzelius.*) Or 1 eq. of sodium=23.3+1 chlorine=35.42, equiv.=58.72.

Prop. Inodorous; taste agreeable, salt; crystals cubes; soluble in three parts of water; permanent in the air; decrepitates when exposed to heat.

Oper. Tonic, purgative, anthelmintic; externally stimulant.

Use. In some cases of dyspepsia and worms; in sea scurvy and purpura; in large doses to check vomiting of blood; as an ingredient in clysters; a fomentation to bruises; and, added to water, to form a stimulant bath.

Dose. Gr. x. to ʒ ss. In clysters, ʒ iv. to ℥ j.

Off. Prep. *Murias Sodæ Siccatum*, E. D. *Acidum Hydrochloricum*, L. E. D. *Hydrargyri Chloridum Corrosivum*, U. S. *Hydrargyri Chloridum Mite*, U. S.

⁂ *Sea water owes its laxative qualities to this salt.* 100 *parts of water taken from the ocean contain at an average* 1-24th *of salt, or common salt* 3.25, *hydrochlorate of magnesia* 0.64, *sulphate of lime* 0.11.

SODÆ SULPHAS. U. S.—L. E. D. Sulphate of Soda, or Glauber's Salts. (From the salt which remains after the distillation of hydrochloric acid, the superabundant acid being saturated with carbonate of soda.)

Comp. Soda 19.75, sulphuric acid 24.69, water of crystallization 55.56 parts; or 1 eq. soda=31.3+1 acid=40.1, equiv.=71.4.

Prop. Inodorous; taste strongly saline and bitter, nauseous; crystals hexagonal channelled prisms, with dihedral summits; efflorescent; soluble in three parts of water at 60°; undergoes the watery fusion.

Oper. Purgative; in small doses diuretic.

Use. In costiveness, the most generally employed purgative; in bilious colics, largely diluted.

Dose. Of the effloresced salt in powder, ʒ iij. to ʒ vj.; of the crystallized salt in solution, ʒ vj. to ʒ xij.; its nauseous taste may be corrected by lemon juice or cream of tartar.

Incomp. Carbonas potassæ, chlorides of calcium and barium, salts of lead, of silver.

SODÆ POTASSIO-TARTRAS. L. Potassæ et Sodæ Tartras, E. Tartras Sodæ et Potassæ, D. Potassio-Tartrate of Soda. (*Sodæ Carbonatis* ℥ xij., *Potassæ Bitartratis* ℥ xvi., *Aq. Ferv.* Oiv. Dissolve the carbonate in the water, and add gradually the bitartrate. Filter the solution; then apply a gentle heat until a pellicle forms, and crystallize.) *Soda Tartarizata.*

Comp. Tartrate of potassa 54, tartrate of soda 46, in 100 parts: or 1 eq. of tartrate of potassa=113.63+1 of tartrate of soda=97.78+8 water=72, equiv.=283.41.

Prop. Inodorous; taste bitter; crystals eight sided prisms, the ends truncated at right angles; efflorescent; soluble in five parts of water.

Oper. Cathartic.

Use. In costiveness; well suited to cases of jaundice, calculus, and puerperal fevers

Dose. ʒ j to ℥ j.

Incomp. Mineral acids; acidulous salts, except bitartrate of potassa; chloride of calcium; salts of lead

SOLIDAGO. U. S. (*Secondary.*) Golden Rod. Solidago *Odora.* Folia. The Leaves. (*Syngenesia Superflua.* N. O. *Compositæ, Corymbiferæ.*) *Indigenous.*

Prop. Leaves have a fragrant odor, and a warm, aromatic, agreeable taste, depending on a volatile oil, of a pale greenish yellow color, and lighter than water.

Oper. Aromatic, stimulant, carminative, diaphoretic.

Use. To relieve pain arising from flatulence; to allay nausea.

SOLUTIO ACETĀTIS ZINCI. E. Solution of Acetate of Zinc. (*Sulphatis Zinci* ʒj., *Aq. Distil.* f℥x., *Solve: Acetatis Plumbi* ℈iv., *Aq. Distil.* f℥x. *Solve.* Mix the solutions, and after they have remained at rest for a little time, filter the mixture.) A limpid fluid.

Oper. Astringent.

Use. Externally, as a collyrium in ophthalmia, after the vessels are unloaded; and as an injection in gonorrhœa.

⁂ (*In this preparation a double decomposition takes place; the sulphate of lead which is formed is insoluble, and the acetate of zinc soluble, on which account they are thus easily separated; but when the acetate is intended to be used as an injection in gonorrhœa, the mixture should not be filtrated.*)

SOLUTIO MURIATIS BARYTÆ. E. D. Liquor Barii Chloridi, L. Solution of Chloride of Barium. (*Mur. Barytæ* ʒj., *Aq. Distil.* f℥j., E.: *Barii Chloridi* ʒj., *Aq. Distil.* f℥j., L. Dissolve.) A limpid, colorless fluid.

Oper. Stimulant, deobstruent, diuretic; in large doses emetic, purgative, and extremely deleterious; externally escharotic.

Use. In scrofulous affections; glandular obstructions; worms, and cutaneous diseases; but its efficacy is doubtful. Externally to fungous ulcers, and specks on the cornea.

Dose. ♏v. to ♏x. twice or thrice a day, and gradually increased till the nausea is produced.

Incomp. Sodæ sulphas, alumen, potassæ nitras, and argenti nitras.

SOLŪTIO MURĬATIS CALCIS. E. Liquor Calcii Chloridi, U. S.—L. Aqua Muriatis Calcis, D. Solution of Chloride of Calcium. (*Calcii Chloridi* ℥iv., *Aquæ Dist.* f℥xij. Dissolve the chloride of calcium in the water; then filter through paper. *Lond.* Or, take of *marble,* in fragments, ℥ix., *Muriatic Acid* Oj., *Distilled Water* q. s. Mix the acid with Oss. of the distilled water, and gradually add the marble. Towards the close of the effervescence apply a gentle heat, and when the action has ceased, pour off the clear liquor and evaporate to dryness. Dissolve the residuum in its weight and a half of distilled water, and filter the solution.—*U. S. Phar.*) A colorless fluid.

Oper. Tonic, stimulant, deobstruent.

Use. In scrofulous tumors, glandular obstructions, general debility, and laxity of habit.

Dose. ♏xv. to fʒjss. in a cupful of water, twice or thrice a day.

Incomp. Sulphuric and nitric acids; potassa, soda, and their carbonates; sulphas sodæ, sulphas potassæ, nitras potassæ, and biboras sodæ.

SOLUTIO SULPHATIS CUPRI COMPOSĬTA. Olim *Aqua Styptica,* E. Compound Solution of Sulphate of Copper. *Sulphatis Cupri,* —— *Aluminæ, sing.* ℥iij., *Aquæ* Oij., *Acidi*

Sulphurici ℥jss. Boil the sulphates in water to dissolve them, and to the filtered liquor add the acid.) *Aqua Cupri Vitriolata*

Oper. Astringent.

Use. External, to stop bleedings at the nose, by the application of dossils steeped in it to the nostrils.

SOLUTIO SULPHATIS ZINCI. E. Solution of Sulphate of Zinc. (*Sulphatis Zinci* gr. xvj., *Aquæ* f℥viij., *Acidi Sulphurici Diluti* gr. xvj. Dissolve the sulphate, then add the water, and filter through paper.)

Oper. Astringent.

Use. As a lotion in the latter stage of ophthalmia; and an injection in gonorrhœa.

SPIGELIA. U. S.--L. E. D. Indian Pink Root. *Pentandria, Monogyn.* N. O. *Gentianaceæ.* Indigenous. ♃.)

Comp. Oil, resin, bitter principle, gallic acid, mucilage, sugar, albumen, woody fibre, salts of potassa and lime.

Oper. Anthelmintic.

Use. For the expulsion of lumbrici; in the remitting fever of infancy. Its use should be preceded by an emetic, and followed by a warm purgative.

Dose. Gr. x. to ʒss. of the powdered root, every night and morning, till the worms are expelled; or an infusion combined with senna.

Off. Prep. Infusum Spigeliæ, U. S.

SPIREA. U. S. (*Secondary.*) Hardhack. Sp. *Tomentosa*, Radix. The Root. (*Icosandria, Pentagyn.* N. O. *Rosaceæ.*)

Comp. Tannin, gallic acid, bitter extractive.

Prop. Taste bitter, and powerfully astringent: water extracts its medicinal virtues.

Oper. Tonic, astringent.

Use. In cholera infantum, diarrhœa, and all cases where a tonic combined with an astringent effect is needed.

Dose. Of the extract, from gr. v. to gr. xv.; from f℥j. to f℥ij. of the decoction.

ÆTHER SULPHURICUS CUM ALCOHOLE AROMATICUS. E. Aromatic Spirit of Æther. (*Cinnam. Cort. cont.* ʒiij., *Cardam. Semin. cont.* ʒjss., *Piperis Longi Fruct. cont.*, *Zingiberis Rad. concisæ, sing.* ʒj., *Spiritus Æther. Sulph.* Oj. Macerate for fourteen days in a stopped glass vessel, and strain.) *Elixir Vitrioli Dulce.*

Oper. Stimulant.

Use. In faintings and nervous affections.

Dose. fʒss. to fʒj.

SPIRITUS ÆTHERIS SULPHURICI COMPOSITUS. U. S. —L. Spiritus Ætheris Sulphurici, E. Compound Spirit of Æther. *Hoffman's Anodyne Liquor.* (*Ætheris Sulph.* f℥viij., *Spiritus Rectificati* f℥xvj., *Olei Ætherei* fʒiij. Mix.) *Spiritus Ætheris Vitriolici.*

Oper. Stimulant, antispasmodic.

Use. In typhus fever, hysteria, and to allay irritation in painful diseases; in headache externally, when the part to which it is applied is kept covered with the hand, in which case it acts as a rubefacient.

Dose. f℥ss. to fʒij. in any convenient vehicle.

SPIRITUS ÆTHERIS NITRICI. U. S.—L. E. Spiritus Æthereus Nitrosus, D. Spirit of Nitric Æther Sweet Spirit of Nitre. (*Spir. Rect.* Oiij., *Acidi Nitrici* ℥iv. Add the acid gradually on the spirit, and mix; then distil, by a gentle heat, f℥xxxij. Or, ℞ *Nitras Potassæ* ℔ij., *Acid. Sulphuric.* ℔jss., *Alcohol* Oixss., *Alcohol Dilut* Oj., *Carbonas Potassæ* ℥j. Mix the nitrate of potassa and the alcohol in a large glass retort, and having gradually poured in the acid, digest with a gentle heat for two hours, then raise the heat and distil a gallon. To the distilled liquor add the diluted alcohol and carbonate of potassa, and again distil a gallon.)—*U. S. Phar.*

Comp. 1 eq. of æther=37.48+1 of hyponitrous acid=38.15, equiv.=75.63.

Prop. Odor fragrant; taste pungent; acidulous, colorless; volatile, inflammable; soluble in alcohol and water; spec. grav. 0.834—0.874, L. E. When agitated with twice its volume of concentrated solution of chloride of calcium,. 12 per cent. of æther separates.

Oper. Refrigerant, diuretic, antispasmodic, diaphoretic.

Use. In febrile diseases; spasmodic asthma; and dropsies, as an assistant to more active remedies.

Dose. ♏xx. to fʒj. in any convenient vehicle.

SPIRĬTUS ÆTHĔRIS SULPHURICI. E. Liquor Æthereus Sulphuricus, D. Spirit of Sulphuric Æther. (*Ætheris Sulph.* Oj., *Spir. Rectif.* Oij. Mix.)

Oper. Stimulant, diaphoretic, diuretic, antispasmodic.

Use. The same as sulphuric æther; fʒj. in f℥vj. of barley-water and syrup of marshmallows fʒiv., form a useful gargle in slight inflammation of the fauces.

Dose. fʒss. to fʒiij.

SPIRĬTUS AMMŌNIÆ. U. S.—L. E. D. Spirit of Ammonia. (*Ammoniæ Hydrochloratis* ℥x., *Potassæ Carb* ℥xvj., *Spiritus Rect.*, *Aquæ*, āā Oiij. Mix, and distil Oiij. Or, ℞ *Muriat. Ammoniæ*, *Calcis*, āā ℔j., *Alcohol* ℥xx., *Aquæ* ℥ix. Slake the lime with the water, mix it with the mur. ammonia, and distil upon a sand bath. When all the ammonia has come over, remove the liquor, and keep it in small bottles well stopped.—*U. S. Phar.*)

Prop. Odor pungent, ammoniacal; taste pungent, acrid; colorless.

Oper. Stimulant, diaphoretic, antispasmodic.

Use. In paralysis, faintings, and nervous debilities.

Dose. fʒss to fʒj. in water.

Off. Prep. *Spir. Ammoniæ Aromaticus*, U. S.—L. E. D. *Spir. Ammoniæ Fætid.*, L. E. D.

SPIRĬTUS AMMŌNIÆ AROMATĬCUS. U. S.—L. E. D. Aromatic Spirit of Ammonia. (*Ammoniæ Hydrochlor.* ℥v, *Potassæ Carb.* ℥viij., *Cinnamomi*, *Caryophyllorum cont.*, āā ʒij., *Cort. Limonum* ℥iv., *Spir. Rect.*, *Aquæ*, āā Oiv. Mix, and distil six pints.)

Oper. Stimulant, diaphoretic.

Use. In the same cases as the spirit of ammonia; it is more grateful, and less acrimonious.

Dose fʒss. to fʒj. in any convenient vehicle.

Off. Prep. *Tinct. Guaiaci Ammoniata*, U. S.—L. E. D. *Tinct. Valerianæ Ammoniata*, U. S.—L. D.

Incomp. Acids, acidulous salts, metallic salts, lime-water.

SPIRĬTUS AMMŌNIÆ FŒTIDUS. L. E. D. Fetid Spirit of Ammonia. (*Ammon. Hydrochl.* ℥ x., *Potassæ Carb.* ℥ xvj., *Spir. Rect.*, *Aquæ*, sing. Oiij., *Assafœtidæ* ℥ v. Mix, and with a slow fire distil three pints.)

Prep. Odor fetid and ammoniacal; taste alkalescent, acrid, and slightly alliaceous; pale when recent; colored brown by age.

Oper. Stimulant, antispasmodic.

Use. In hysteria, atonic gout, and spasmodic asthma.

Dose. f ʒ ss. to f ʒ j. in water.

SPIRĬTUS ANISI. L. Spiritus Anisi Compositus, D. Spirit of Aniseed. (*Anisi Sem. cont.* ℥ x, *Spir. Ten. cong* j., *Aquæ* Oij. Mix, and distil a gallon by a gentle heat.) A spirituous solution of the oil of aniseed.

Oper. Carminative.

Use. In flatulent states of the stomach; but it is often abused and produces dram-drinking.

Dose f ʒ j. to f ʒ iv.

SPIRĬTUS ARMORACIÆ COMPOSĬTUS. L. D. Compound Spirit of Horse Rudish. (*Armoraciæ Radicis recent. concisæ*, *Aurant. Cort. exsic.*, *sing.* ℥ xx., *Myristicæ Nuc. contus.* ʒ v., *Spirit. Ten. cong.* j., *Aquæ* Oij. Mix, and distil a gallon.)

Oper. Stimulant, antiscorbutic.

Use Scarcely now used in scorbutus; but it is a useful adjunct to infusion of foxglove in dropsies attended with much debility.

Dose. f ʒ j. to f ʒ iv.

SPIRĬTUS CAMPHORATUS. D. Tinctura Camphoræ, E. Spirit of Camphor. (*Camphoræ* ℥ iv., *Spirit. Rect.* Oij.)

Oper. Stimulant, anodyne, discutient.

Use. External, against rheumatic pains, paralytic numbness, chilblains, gangrene, and for discussing tumors.

Incomp. Water, which precipitates the camphor.

SPIRITUS CARŬI. L. E. D. Spirit of Caruway. (*Carui Sem. contus.* ℥ xxij., *Spir. Ten. cong.* j, *Aquæ* Oij. Mix, and distil a gallon.) A spirituous solution of the oil.

Oper. Carminative.

Use. In flatulence; and as an adjunct to griping purgatives.

Dose. f ʒ j. to f ℥ ss.

SPIRĬTUS CASSIÆ. E. Spirit of Cassia. (*Cassia in coarse powder* ℔j., *Proof Spirit* Ovij. Macerate for two days, add of water Ojss., and distil seven pints.)

Use. The same as Spiritus Cinnamomi.

SPIRĬTUS CINNAMOMI. L. D. Spiritus Lauri Cinnamomi, E. Spirit of Cinnamon (*Cinnamomi Olei* ʒ ij., *Spir. Ten. cong.* j., *Aquæ* Oj. Mix, and with a slow fire distil a gallon.) A spirituous solution of the oil.

Oper. Stimulant.

Use. In diseases attended with much languor and debility.

Dose. f ʒ j. to f ʒ iv.

Off. Prep. *Infusum Digitalis*, U. S.—L. ·

SPIRĬTUS JUNIPĔRI COMPOSĬTUS. U. S—L. E. D Compound Spirit of Juniper. (*Juniperi Fruct cont.* ℥ xv., *Carui Sem. cont.*, *Fœniculi Sem. cont.*, *sing.* ℥ ij, *Spir. Ten. cong.* j., *Aquæ* Oij. Mix, and distil a gallon.)

Oper. Stimulant, diuretic.

Use. As an adjunct to diuretic infusions in dropsies.

Dose. f ʒ j. to f ℥ j.

SPIRĬTUS LAVANDŬLÆ. U. S.—L. E. D. Spirit of La vender. (*Lavandulæ recent.* ℔ijss., *Spir. Rect. cong.* j., *Aquæ* Oij. Mix, and distil a gallon.) A spirituous solution of the oil.

Use. As a perfume, and to make the following articles:—

Off. Prep. *Tinctura Lavandulæ Comp.*, L. E. D. *Linimentum Camphoræ Comp.*, L.

SPIRĬTUS LAVANDŪLÆ COMPOSĬTUS. U. S.—E. See *Tinctura Lavandulæ Composita.*

SPIRĬTUS MENTHÆ PIPERĬTÆ. L. D. Spiritus Menthæ, E. Spirit of Peppermint. (*Olei Menthæ Pip.* ʒ iij., *Spiritus Rectificat. cong.* j., *Aquæ* Oj. Mix, and distil a gallon.)

Oper. Carminative, stimulant.

Use. In nausea, flatulence, and faintings.

Dose. f ʒ ss. to f ʒ iij.

SPIRĬTUS MENTHÆ VIRĬDIS. L. D. Spirit of Spearmint

Oper. Carminative, stimulant.

Use. In nausea, flatulence, and faintings.

Dose. f ʒ ss. to f ʒ ij. in any proper vehicle.

SPIRĬTUS MYRISTICÆ. U. S.—L. E. Spir. Nucis Moschatæ, D. Spirit of Nutmeg. (*Myristicæ Nucleor. cont.* ℥ ijss., *Spir. Ten. cong.* j., *Aquæ* Oj. Mix, and distil a gallon.)

Oper. Cordial, carminative.

Use. In faintings, and as an adjunct to griping purgatives.

Dose. f ʒ ss. to f ʒ iv.

SPIRĬTUS PIMENTÆ. U. S.—L. E. D. Spirit of Pimento.

Oper. Cordial, carminative.

Use. In flatulent colic, atonic gout, &c.

Dose. f ʒ j. to f ʒ iv.

SPIRĬTUS MENTHÆ PULEGII. L. D. Spirit of Pennyroyal

Oper and *Use.* The same as that of Spearmint.

Dose. f ʒ j. to f ʒ iv.

SPIRĬTUS RECTIFICĀTUS. L. E. D. Rectified Spirit. Spec. grav. 838.

Oper. and *Use.* The same as of alcohol.

SPIRĬTUS ROSMARINI. U. S.—L. E. D. Spirit of Rosemary (*Olei Rosmarini* ʒ ij., *Spir. Rectif. cong.* j., *Aquæ* Oj. Mix, and with a slow fire distil a gallon.)

Oper. Stimulant.

Use. In languors; externally to pains and bruises. A fragrant perfume.

Dose. f ʒ j. to f ʒ iv.

Off. Prep. *Linimentum Saponis*, U. S.—L. E. D. *Tinct. Lavandulæ Comp.*, U. S.—L. E. D. *Tinct. Saponis Camphorata*, U. S.

SPIRĬTUS TENUIOR. L. E. D. Proof Spirit. Spec. grav. 930, L. D.; 935, E.

Comp. Alcohol 44, water 56 parts, in 100, according to the London and Dublin; and alcohol 42, water 58, according to the Edinburgh Pharmacopœia

Oper. Stimulant.

Use. In the same cases, internally, as those in which alcohol is used; externally, much diluted in ophthalmia, superficial inflammation, and burns; chiefly employed as a solvent of vegetable matters in the formation of tinctures, &c.

Off. Prep. *Tincturæ Variæ*, L. E. D. *Spiritus*, L. E. D.

SPIRĬTUS VINI GALLICI. L. Brandy.

SPONGĬA. U. S.—D. E. Sponge (Class *Zoophyta*, Order *Spongia*. Mediterranean and Red Sea.)

Comp. Gelatine, osmazome, animal mucus, fat, oil, traces of chloride of sodium, iodine, sulphur, phosphate of lime, silica, alumina, and magnesia.

Prop. Of a pale brownish-yellow color, light, soft, very porous; absorbing fluids by capillary attraction.

Use. External. For absorbing the acrid discharge from ulcers; suppressing hæmorrhages, when the bleeding mouth of the vessel is compressed with it; to form tents for dilating wounds, in which case the sponge is immersed in melted wax, and cooled before being used: for making burnt sponge.

SPONGĬÆ USTÆ PULVIS. D. Burnt Sponge. (The sponge is cut into pieces, burnt to a friable coal in a covered vessel and rubbed to a powder.)

Comp. Carbonate and phosphate of lime; carbonate of soda charcoal; iodide of sodium.

Oper. Tonic, deobstruent, antacid.

Use. In bronchocele, scrofulous complaints, and herpetic eruptions.

Dose. ʒj. to ʒiij., made into an electuary, with honey and powdered cinnamon.

STANNUM. U. S.—L. E. Stannum, Limatura, Pulvis, D. Tin Filings and Powder.

Prop. Odor peculiar when rubbed; insipid; color white, softish spec. grav. 7.291.

Oper. Mechanical?

Use. See *Pulvis Stanni.*

STAPHISĂGRĬA. L. E. D. Staves Acre Seed. (Delphinium *Staphisagria*. *Polyandria*, *Trigynia*. N. O. *Ranunculaceæ* Istria, Apulia, Crete. ♂.)

Comp. Delphinia, volatile and fatty oils, albumen, woody fibre, gum, starch, phytocol, sugar, and various salts.

Prop. Odor disagreeable; taste nauseous, bitterish, hot; figure of the seed an irregular triangle; extremely black; white within.

Oper. Cathartic, emetic, vermifuge.

Use. Owing to the violence of its operation, it is very seldom given internally; and is only used as a powder mixed with hair-powder to destroy pediculi.

STATICE. U. S. Marsh Rosemary. (Statice *Caroliniana*. *Pentand. Pentagyn*. United States. ♃.) The Root.

Comp. Tannic and gallic acid.

Prop. Taste austere, bitter, intensely astringent.

Oper. Astringent, antiseptic.

Use. In gargles, in aphthous and malignant sore throat; and internally in chronic dysentery.

STRAMONII SEMINA, FOLIA. U. S.—L. D. Stramonium, E. The Leaves and Seeds of Thorn Apple.

Comp. *Leaves* contain gum extractive, starch, albumen, resin, saline matters, lignin, water; the *seeds* contain, in addition, a peculiar alcoholic principle, *daturia*, wax, fatty matter, fixed oil, bassorin, &c.

Use. The same as the extract.

STYRAX. U. S.—L. E. Styracis Resina, D. Storax. (Styrax *Officinale*. (*Decand. Monogyn.* N. O. *Styraceæ*. Syria. ♄.)

Comp. Oleo-resin, benzoic acid.

Prop. Odor fragrant, agreeable; taste aromatic; in masses composed of distinct tears of a yellowish red or brownish color. Often adulterated with sawdust.

Oper. Stimulant, expectorant.

Use. Seldom used alone, but as an adjunct, chiefly on account of its fragrance and aromatic properties.

Dose. Gr. x. to ʒ ss.

Off. Prep. *Styrax Purificata*, U. S.—D. *Pilulæ Styracis Comp.*, L. E. *Pilula e Styrace*, D. *Tinct. Benzoin Comp.*, U. S

STRYCHNIA. U. S.—L. E. Strychnia. An alkali prepared from the Strychnos Nux Vomica.

Comp. 30 eq. carbon=183.6+16 eq. hydrogen=16+3 eq. oxygen =24+1 eq. nitrogen=14.15 equiv.=237.75.

Use. As a tonic in pyrosis, passive diarrhœa, and leucorrhœa; in cases of partial paralysis not depending on organic disease, especially when caused by carbonate of lead.

Dose. From gr. 1-10th to gr. ¼th.

STRYCHNIÆ ACETATIS SOLUTIO. ***Author.*** Solution of Acetate of Strychnia. (*Strychniæ* gr. j., *Aceti dist.* f ʒ j.)

Oper. The same as strychnia, but a more certain mode of insuring its influence.

Use. In paralysis and atonic diarrhœa.

Dose. ♏x. to ♏xxx.

STRYCHNIA NITRAS. F. Nitrate of Strychnia. (*Strychniæ* quantum vis, *Acidi Nitrici diluti* quantum opus sit.)

Prop. Crystals white, acicular, very soluble in water.

Use. The same as the acetate.

Dose. 1-16th to 1-10th of a grain.

⁂ There are various salts prepared from strychnine, as the *acetate*, the *iodate*, the *nitrate*, and the *sulphate*, which, however, possess no advantages over the pure *strychnine*. Their introduction, therefore, into medicine is not desirable. (For their mode of preparation, doses, &c., see *Dunglison's* "*New Remedies*.")

STRYCHNOS NUX VOMICA. U. S.—D. Nux Vomica, L. E. Ratsbane. (Strychnos *Nux Vomica. Pentand. Monogynia.* N. O. *Apocynaceæ*. India. ♃.)

Prop. Inodorous; taste intensely bitter, poisonous. Its efficacy as a remedy depends on a peculiar alkali, named strychnia, combined with igasuric acid.

Oper. Tonic, stimulant; when taken in large doses it produces tetanic spasms.

Use. In dyspepsia; gout; rheumatism; and especially in paralysis of the lower extremities.

Dose. From gr. iij. to gr. xij.

⁂ *For its poisonous properties, see Appendix No. I.*

SUBLIMATUS CORROSIVUS. E. Corrosive Sublimate. See *Hydrargyri Bichloridum.*

SUBMURIAS HYDRARGYRI PRÆCIPITATUS. E. Calomelas Præcipitatum, D. Precipitated Submuriate of Mercury

Comp. 1 eq. of mercury=202+1 of chlorine=35.42, equiv.= 237.42.

Prop. Inodorous; insipid; in a fine white powder.

Oper. Antisyphilitic, alterative.

Use and Dose The same as of calomel, from which it differs only in being in a finer powder than the other can be reduced to on which account it can be more advantageously combined with lard, for external use.

SUBSULPHAS HYDRARGY̆RI FLĂVUS. E. Yellow Subsulphate of Mercury, formerly Turpeth Mineral. (A protoxide, combined with acid.) *Hydrargyri Vitriolatus Flavus.*

Comp. Mercury 76, oxygen 11, sulphuric acid 10, water 3, in 100 parts.—(*Fourcroy.*) Or 4 eq. of peroxide of mercury=872+8 of sulphuric acid=120.3, equiv=992.3.

Prop. Inodorous; taste acrid; of a bright yellow color; soluble in 1000 parts of water at 60°, and 600 at 212°.

Oper Emetic, discutient, errhine, alterative.

Use. Seldom employed internally, owing to its violent effects it is, however, a useful emetic in swelled testicles; and, when mixed with liquorice-root powder, and snuffed up the nostrils at bed-time, it forms an excellent errhine in chronic ophthalmia.

Dose. Gr. j. to gr. iij.

SUCCĪNUM. U. S.—L. E. D. Amber. (Found on the shores of the Baltic.)

Comp. A resinous matter, essential oil, and an acid *sui generis.*

Prop. Inodorous, except when heated or rubbed; insipid; in fragments of a pale golden yellow color, transparent; has a shining lustre; fracture conchoidal; brittle; spec. grav. 1.08 insoluble in water; slightly acted on by alcohol.

Use. To afford its essential oil and acid.

Off. Prep. *Acidum Succinicum,* E. D. *Oleum Succini,* U. S.—L. E. D.

SUCCUS SPISSĀTUS SAMBŪCI NĪGRÆ. D. Inspissated Juice of Elder Berries, vulgarly called Elder Rob. (*Succi Baccarum Sambuci Nig. matur. partes* v., *Sacch. pur. partem* j Boil with a gentle heat to the consistence of honey.)

Prop. Odor that of the berries; taste acidulous, sweet.

Oper. Cooling, laxative, diuretic.

Use. Diluted with water as a beverage in cases of inflammatory fevers; and catarrh.

Dose. f℥ss. to f℥jss. diluted with water.

SULPHAS BARȲTÆ. E. D. Sulphate of Baryta. (A natural production.)

Comp. Baryta 66, sulphuric acid 34, in 100 parts.—(*Berzelius.*) Or 1 eq. baryta=76.7+1 of acid=40.1, equiv.=116.8.

Prop. Foliated; spec. grav. 4.4; decrepitates when heated; insoluble in water; soluble in boiling concentrated sulphuric acid.

SULPHAS POTASSÆ CUM SULPHŪRE. E. Sulphate of Potassa with Sulphur. (*Nitratis Potassæ in pulv. triti, Sulphuris Sublimati, pondera æqualia.* Gradually deflagrate in a red-hot crucible and, when cold, preserve it in a well-stopped glass vessel.) The nitrate is decomposed. *Lixivia Vitriolata Sulphurea.*

Oper. and *Use.* The same as the sulphate of potassa, into which it is converted by attracting oxygen, when exposed to the atmosphere.

Dose. Gr. xv. to ʒj.

SULPHUR. U. S.—L. E. Roll Sulphur. (A volcanic production. Sicily.) Impure sulphur, melted and run into moulds.

Prop. Odorous when heated or rubbed; insipid, solid, brittle;

spec. grav. 1.99; fusible at 226°, crystallizing as it cools; volatilized by heat, condensing unchanged.

SULPHUR PRÆCIPITATUM. U. S. *Precipitated Sulphur. Lac Sulphuris.* (℞ *Sulphur* ℔j., *Lime* ℔jss., *Water* two gallons, *Muriatic Acid* q. s. Slake the lime with a small portion of the water, and having mixed it with the sulphur, add the remainder of the water, boil for two or three hours, occasionally adding water so as to preserve the measure, and filter. Dilute the filtered liquor with an equal bulk of water: then drop into it sufficient muriatic acid to precipitate the sulphur. Lastly, wash the precipitate repeatedly with water till the washings are tasteless, and dry it.)—*U. S. Phar.*

Oper. Laxative and alterative; emmenagogue.

Use. In cutaneous affections, and as a laxative in constipation and hæmorrhoids.

Dose. ʒj. in the form of an electuary, two or three times a day, or combined with magnesia or cream of tartar.

SULPHUR SUBLIMATUM. E. D. Sublimed Sulphur, commonly called Flowers of Sulphur. (The sulphur of commerce, which is obtained from pyrites, sublimed in close vessels.)

Prop. Inodorous, unless rubbed between the fingers, or heated, slightly acidulous; a fine powder, of a bright yellow color; very inflammable; contains a small portion of sulphuric acid produced in the sublimation, from which it is freed by washing soluble in linseed oil.

Oper. Stimulant, laxative, diaphoretic, transpiring through the cutaneous exhalants.

Use. As a laxative in chronic rheumatism, atonic gout, rachitis, asthma, and some pulmonary affections; in hæmorrhoidal affections it is the only laxative that should be employed, united with magnesia or bitartrate of potassa. A specific in itch, and several cutaneous diseases, when either internally or externally exhibited.

Dose. ʒss. to ʒij. taken night and morning.

SULPHURETUM HYDRARGYRI CUM SULPHURE. L. E. D. Black Sulphuret of Mercury. (*Hydrargyri Purif.*, *Sulphuris Sublimati, sing.* ℔j. Rub them together, until the globules disappear.) *Æthiopis Mineralis.*

Comp. Sulphuret of mercury 58, sulphur 42, in 100 parts.

Prop. Inodorous; nearly insipid; a very black powder, impalpable to the touch; completely volatilized by heat; should not give a white color to gold when rubbed on it; soluble in solution of pure potassa.

Oper. Anti-venereal, alterative, anthelmintic.

Use In syphilis; but it is the most inactive of the mercurial preparations; in glandular swellings: it is sometimes useful against ascarides.

Dose. Gr. v. to ʒss.

SULPHURIS IODIDUM. U. S. *Iodide of Sulphur.* (℞ *Iodine* ℥iv., *Sulphur* ℥j. Rub together in a glass mortar till thoroughly mixed. Put the mixture into a matrass, close the orifice loosely, and apply a gentle heat, so as to darken the mass without melting it. When the color has become uniformly dark throughout, increase the heat so as to melt the iodide; then incline the matrass in different directions; and lastly, allow it to cool, break it, and put the iodide into bottles, which are to be well stopped.)—*U. S. Phar.*

Prop. Iodide of sulphur is entirely dissipated by heat. When boiled in water, iodine escapes with the vapor, and sulphur is deposited nearly pure.

Oper. A powerful alterative, especially in *lupus*, *acne*, and psoriasis.

Use. In cutaneous affections, secondary syphilis, rheumatism, &c. The ointment of iodide of sulphur should be made at first by mixing gr. x. of the iodide with ℥j. lard; the strength may be gradually increased, as the skin can bear it, until it contains ʒss. to the ℥j. lard or spermaceti ointment. (The vapor may be inhaled with advantage in some cases of humoral asthma: combine four parts iodine with one of sulphur, and sublime.)

SUPERTARTRAS POTASSÆ IMPURUS. E. Impure Supertartrate of Potassa. (Deposited on the inside of wine casks.) See *Tartar.*

DISULPHAS QUINÆ. L. Sulphas Quinæ, E. D. Disulphate of Quina.

Comp. Quina 74.31, acid 16.17, water 19.52, in 100 parts; 1 eq. of sulphuric acid=40.1+2 eq. of quina=329.1+8 eq. of water =72, equiv.=447.2.

Prop. Inodorous; taste powerfully bitter; minute white crystals—not very soluble in cold water, unless acidulated.

Oper. Tonic, antiperiodic.

Use. In intermittent fever, debility, and every case in which cinchona has been employed.

Dose. From gr. j. to gr. x., frequently repeated in the course of a day.

Incomp. All the alkalies and alkaline earths.

SYRUPUS. U. S.—L. E. D. Simple Syrup. (*Sacchari Purif.* ℔x., *Aquæ* Oiij. Dissolve the sugar in the water with a gentle heat.)

Prop. Inodorous, sweet, thickish, transparent.

Use. To cover nauseous tastes; but it seldom renders medicine more pleasant, and might well be altogether dispensed with. It is the base of most of the other syrups.

N. B. The *Syrups* should never be kept in a temperature that exceeds 55°. All syrups that contain vegetable mucilage are apt to become ropy and acescent, or deposit crystals of sugar. They are, therefore, more suitable for the winter season. They should never be prepared in quantities, so as to be kept long on hand.

SYRUPUS ACACIÆ. Syrup of Gum Arabic. (℞ *Gum Arabic* 8 parts, *Sugar* 64 parts, *Boiling Water* 32 parts, *Orange-flower Water* 1 part. Dissolve the gum in the boiling water, frequently stirring, then add the sugar; boil so as to form a syrup, and strain; when cold, add the orange-flower water.)

SYRUPUS ACETI. E. Syrup of Vinegar. (*Aceti Gallici* ℥xj., *Sacch. Pur.* ℥xiv. Boil them so as to form a syrup.) *Syrupus Aceti.*

Prop. Odor acetous; taste sweet, acidulous.

Oper. Refrigerant, antiseptic

Use. In fevers, diluted with water, as a beverage; and in scorbutus.

Dose. fʒj. to fʒij.

SYRŪPUS ACIDI HYDROCYANICI. Syrup of Hydrocyanic Acid. (℞ Syrupi purificat. ℔j., Acidi hydrocyanici medicinalis ʒj. Mix.)—*Majendie.*

Use. Add to common pectoral mixtures; used as other syrups are.

SYRŪPUS ALLII. U. S. *Syrup of Garlic.* (℞ Of *Fresh Garlic* sliced ℥vj., *Distilled Vinegar* Oj., *Sugar* ℔ij. Macerate the garlic in the vinegar, in a glass vessel, four days, then express the liquor, and set it by, that the dregs may subside; lastly, add the sugar to the clear liquor, and remove any scum that may form, and strain the solution while hot)—*U. S. Phar.*

SYRŪPUS ALTHÆÆ. L. E. Syrup of Marshmallows. (*Althææ Rad. contus.* ℥viij., *Sacch. Purificati* ℔ijss., *Aquæ* Oiv. Boil the root in the water to one-half, and press out the liquor, defecate, and having added the sugar, boil down to a proper consistence.) Very susceptible of decomposition when kept.

Oper. Emollient, demulcent.

Use. In catarrh, nephritic cases, and for sweetening demulcent drinks in acute fevers.

Dose. fʒj. to fʒiij.

SYRŪPUS AMYGDALÆ. U. S. *Syrup of Almonds. Syrup of Orgeat.* (Take of *Sweet Almonds* ℔j., *Bitter Almonds* ℥iv., *Water* Oiij., *Sugar* ℔vj. Having blanched the almonds, rub them in a mortar to a very fine paste, adding, during the trituration, f℥iij. of the water and ℔j. of the sugar. Mix the paste thoroughly with the remainder of the water; strain, with a strong expression; add the remainder of the sugar to the strained liquor, and dissolve with the aid of a gentle heat. Strain through fine linen, and having allowed it to cool, bottle, cork tight, and keep in a cool place.)—*U. S. Phar.*

SYRŪPUS AURANTII. U. S.—L. E. D. Syrup of Orange Peel. (*Aurant. Cort. recent.* ℥ijss., *Aquæ Ferv.* Oj., *Sacch. Pur.* ℔iij. Macerate the peel in the water for twelve hours in a covered vessel; then to the decanted fluid add the sugar.)

Oper. Slightly tonic; stomachic.

Use. An elegant adjunct to stomachic draughts and mixtures.

Dose. fʒj. to fʒij.

SYRŪPUS BRUCINÆ. Syrup of Brucine. (℞ Brucinæ gr. vj., Aquæ distillat. ℥iv., Sacchar. alb. ʒij. Mix.)

Use. In same diseases as strychnine, but weaker in the proportion of 1 to 10.

Dose. A tablespoonful. night and morning.

SYRŪPUS CALCIS CHLORIDI. Syrup of Chloride of Lime. (℞ Calcis chlorid. ʒj, Emuls. amygd. ℥vj., Syrup. gummos. ℥j. Mix.)

Use. In gonorrhœa.

Dose. A tablespoonful every three hours.

SYRŪPUS CARYOPHYLLI RUBRI. D. Syrup of Clove July-flower. (*Petalorum Dianthi Caryophylli recent., unguibus resectis,* ℔j., *Aquæ Bull.* ℔iv., *Sacch. Pur.* ℔vij.)

Prop. Aromatic.

Use. Chiefly to impart its color to extemporaneous mixtures.

Dose. fʒj. to fʒiij.

Incomp. Alkaline solutions.

SYRUPUS CINCHONIÆ. F. Syrup of Cinchonia (Take of sulphate of cinchonin gr. xxxix., simple syrup f℥xvj)

Dose. From fʒj. to f℥j.

SYRŪPUS CROCI. L. E. Syrup of Saffron. (*Croci Stigmatum* ʒx , *Aquæ Fervent.* Oj., *Sacch. Purif.* ℔iij.)

Oper. Cordial.

Use. As an adjunct to stomachic and cordial draughts; but chiefly on account of its color.

Dose. fʒj to fʒij.

SYRŪPUS EMETIÆ. F. Syrup of Emeta. (Take of pure emeta gr. iv., simple syrup ℔j. Mix.)

Use. In catarrh, hooping-cough, and all cases in which ipecacuanha is useful.

Dose. fʒj. to fʒiij.

SYRŪPUS EXTRACTI HYDRO-ALCOHOLICI ÆTHEREI CUBEBARUM. Syrup of the Æthereal Hydro-Alcoholic Extract of Cubebs. (℞ Ext. hydro-alcohol. æther. cubebar. ℥iij. Suspend with mucilage in Aq. menthæ piper. ℔j.; add sacchar. alb. ℔ij. Mix.)

Use. In chronic gonorrhœa, leucorrhœa, &c.

Dose. A teaspoonful three times a day. Four ounces of this syrup contain ʒij. of extract, equal to xj. of powdered cubebs.

SYRŪPUS GENTIANINÆ. Syrup of Gentianine. (℞ Syrup. simplic. ℔j., gentianin. gr. xvj. Mix.)—*Majendie.*

Use. In scrofulous affections.

Dose. A tablespoonful four or five times a day.

SYRŪPUS IODINII. Syrup of Iodine. (℞ Tinctur. iodin. gr vj., syrup. simpl. ℥ij. Mix.)

Dose. To be taken in twenty-four hours.

SYRŪPUS IPECACUANHÆ. U. S.—E Syrup of Ipecacuanha. (*Ipecacuanha in coarse powder* ℥iv., *Rectified Spirit* Oj, *Proof Spirit, Water, of each* f℥xiv., *Syrup* Ovij. Digest th ipecacuanha in the rectified spirit for twenty-four hours squeeze, and filter. Repeat this process with the proof spirit and again with the water. Unite the fluids, and distil to ℥xij Add ℥v. of rectified spirit, and then the syrup.

Prop. Expectorant and emetic.

Use. In bronchitis, asthma, croup, and catarrh.

Dose. fʒj. to fʒij.

SYRŪPUS KRAMERIÆ. U. S. *Syrup of Rhatany.* (Take of *Extract of Rhatany* ℥ij., *Water* Oj., *Sugar* ℔ijss. Dissolve the extract in the water and filter, then add the sugar, remove the scum, and strain while hot.)—*U. S. Phar.*

Oper. Astringent and tonic.

Use. In all cases where astringents are indicated.

SYRŪPUS LIMŌNUM. U. S.—L E. D. Syrup of Lemons (*Limonis Succi colati* Oj., *Sacchari Purif.* ℔ijss.) *Syrupus Succi Limonum.*

Oper. Cooling, antiseptic.

Use. To sweeten and acidulate barley-water, and other diluting fluids, in inflammatory and bilious fever. A useful addition to detergent gargles.

Dose. fʒj. to fʒij. or more.

SYRŪPUS MŌRI. L. Syrup of Mulberry. (*Mori Succi colati* Oj., *Sacch Purif.* ℔ijss.)

Oper. Cooling.

Use. For acidulating and sweetening diluting fluids in febrile diseases, and as an adjunct to gargles.

Dose. f ʒj. to ℥iij. or more.

SYRUPUS MORPHIÆ ACETATIS. F. Syrup of Acetate of Morphia. (Take of clarified syrup ℔j., sulphate of morphia gr. iv. Make into a syrup.)

Use. The same as that of Syrup of Poppies.

Dose. From f ʒj. to f ʒiv.

SYRŪPUS MORPHIÆ SULPHATIS. F. Syrup of Sulphate of Morphia. (Take of clarified syrup ℔j., sulphate of morphia gr. iv. Make into a syrup.)

Use. For varying the narcotic, when patients have become accustomed to the action of the acetate.

Dose. From f ʒj. to f ʒiv.

SYRŪPUS OLEI JECINORIS ASELLI. Syrup of Cod-Liver Oil. (℞ Ol. jecinor. aselli ℥viij., Gum arab. pulv. ℥v., Aquæ ℥xij., Syrup. commun. ℥iv., Sacchar. alb. ℥xxiv. Make an emulsion of the four first ingredients; dissolve the sugar at a moderate heat; clarify, and add aqua flor. aurant. ℥ij.)—*Duclou.*

Dose. Two tablespoonsful.

SYRŪPUS PAPAVERIS. L. E. D. Syrup of Poppies. (*Papaveris Capsul.* ℔iij., *Sacchar. Pur.* ℔v., *Aquæ Ferv. cong.* v. Boil the capsules in the water to two gallons, and express strongly. Boil the liquor to Oiv., and strain while hot. Defecate by rest for twelve hours, and boil the clear liquor to Oij., adding the sugar so as to form a syrup.) f ℥j. contains about gr. j. of opium.

Oper. Anodyne.

Use. In catarrh, to abate coughing; and in the diseases of children to allay pain and procure sleep. The degree of strength of the preparation is very uncertain. (℞ Olei olivæ, Oxymellis scillæ, ā ā, Papav. alb., sing. f ℥j., in doses of a teaspoonful, in obstinate coughs and pertussis.

Dose. f ʒj. to f ℥j., according to the age of the patient.

⁂ *It very readily ferments, and therefore should be kept in a cool place.*

SYRŪPUS QUINÆ. F. Syrup of Quina. (Take of sulphate of quina gr. lxiv., simple syrup ℔ij. Mix.)

Use. In all cases in which the sulphate of quina is useful.

Dose. From f ʒij. to f ʒiv.

SYRŪPUS QUININÆ CITRATIS. Syrup of Citrate of Quinine. (℞ Syrup. sacch. clarif. ℔j., Quinin. Acetat. acid. gr. xxxvj. M.)

Dose. Two tablespoonsful in twenty-four hours.

SYRŪPUS QUINÆ SULPHATIS. Syrup of Sulphate of Quinine. (℞ Quinin. sulphat. gr. xvj., Syrup. simpl. ℥viij.)

Dose. A teaspoonful.

SYRŪPUS RHŒADOS. L. E. D. Syrup of Red Poppy. (*Rhœados Petalorum* ℔j., *Aquæ Ferv.* ℔ij., *Sacch. Purif.* ℔ijss. To the water, heated in a warm bath, add the petals gradually, stirring occasionally; next remove the vessel, and macerate for twelve hours; then express the liquor, defecate, and add the sugar so as to form a syrup.)

Use. As coloring matter.

SYRŪPUS RHAMNI. L. E. D. Syrup of Buckthorn. (Rhamn.

Succi recent. Oiv., *Zingiberis concisæ, Pimentæ contrit.*, sing ʒvj., *Sacch. Purif.* ℔iv. Defecate the juice by rest, for three days, and strain. To a pint of the defecated juice add the ginger root and pimenta; then macerate, in a gentle heat, for four hours, and strain; boil what remains to one pint and a half, mix the liquors, and add sugar so as to form a syrup.) *Syrupus Spinæ Cervinæ.*

Oper. Cathartic, but attended with griping, and dryness of the mouth and fauces.

Use. To open the bowels; but owing to its very unpleasant taste, it is seldom employed except in clysters.

Dose. fʒiv. to f℥j., drinking freely of gruel, and other tepid fluids, during the operation.

SYRUPUS RHEI. U. S. Syrup of Rhubarb. (Take of *Rhubarb* bruised ℥ij., *Boiling Water* Oj., *Sugar* ℔ij. Macerate the rhubarb in the water twenty-four hours, and strain; then add the sugar, and proceed in the manner directed for *Syrup. Allii.*) —*U. S. Phar.*

SYRUPUS RHEI AROMATICUS. U. S. Aromatic Syrup of Rhubarb. (Take of *Rhubarb* bruised ℥ijss., *Cloves, Cinnamon*, bruised, each ℥ss., *Nutmeg* bruised ʒij., *Diluted Alcohol* Oij., *Syrup* Ovj. Macerate the rhubarb and aromatics in the diluted alcohol for fourteen days, and strain; then, by means of a water bath evaporate the liquor to Oj., and while hot, mix it with the syrup previously heated.)—*U. S. Phar.*

SYRUPUS ROSÆ. L. D. Syrupus Rosæ Centifoliæ, E. Syrup of the Rose. (*Rosæ Centifoliæ Petal. exsiccat.* ℥vij., *Sacch. Purif.* ℔vj., *Aquæ Ferv.* Oiij. Macerate the petals in the water for twelve hours; evaporate the strained liquor to Oiij., and add the sugar so as to form a syrup.)

Oper. Gently laxative.

Use. In costiveness of weak habits, and of children.

Dose. fʒj. to f℥j. or more.

SYRUPUS ROSÆ GALLICÆ. E. Syrup of Red Rose. (*Petal. siccat. Rosæ Gallicæ* ℥ij., *Aquæ Bull.* ℔j., *Sacch. Pur.* ℥xx. Prepared in the same manner as the former.)

Oper. Mildly astringent.

Use. As an adjunct to stomachic infusions, and to gargles; but it is on account of its color that it is valued.

Dose. fʒij. to f℥iv. or more.

SYRUPUS SARSAPARILLÆ COMPOSITUS. U. S. Compound Syrup of Sarsaparilla. (Take of *Sarsaparilla* bruised ℔ij., *Guaiacum Wood* rasped ℥iij., *Hundred Leaved Roses Senna, Liquorice Root*, bruised, each ℥ij., *Oil Sassafras, Oil Anise*, each five minims, *Oil of Partridge Berry* three minims, *Diluted Alcohol* Ox., *Sugar* ℔viij Macerate the sarsaparilla, guaiacum, roses, senna and liquorice root in the diluted alcohol, fourteen days; then express and filter. Evaporate the tincture by means of a water bath to four pints, filter, add the sugar, remove any scum which may form, and strain the solution while hot.)—*U. S. Phar.*

SYRUPUS SARZÆ. L. E. D. Syrup of Sarsaparilla. (Sliced Root of Sarsaparilla ℥xv., Boiling Water a gallon, Purified Sugar ℥xv. Macerate the root in water for twenty-four hours; then boil down to four pints, and strain the liquor while it is yet hot· then add the sugar, and boil down to a proper consistence.)

Use. In the same cases as the root.

Dose. From fʒj. to fʒiv.

SYRŪPUS SENNÆ. U. S.—L. E. Syrup of Senna. (*Sennæ Folior.* ℥ijss., *Fœniculi contus.* ʒx., *Mannæ* ℥iij., *Sacchar. Pur.* ℥xv., *Aquæ Ferv.* Oj. Macerate the senna leaves and fennel seeds for twelve hours; strain, adding the manna and sugar to the juice, to form a syrup.)

Oper. Purgative.

Use. For the costiveness of children, and persons of a delicate habit of body.

Dose. fʒij. to f℥ss. or more.

SYRŪPUS SCILLÆ. U. S.—E. Syrup of Squill (*Aceti Scillæ* Oiij., *Sacch. Pur. cont.* ℔vij.)

Oper. Diuretic, expectorant, emetic.

Use. In the same cases as those for which the oxymel is employed; as an emetic it is given only to children.

Dose. fʒj. to fʒij.

SYRŪPUS SCILLÆ COMPŎSITUS. U. S. Compound Syrup of Squill. *Hive Syrup.* (Take of *Squill* bruised, *Seneka*, each ℥iv., *Tartrate of Antimony* and *Potassa* gr. xlviij., *Water* Oiv., *Sugar* ℔iijss. Pour the water upon the squill and seneka, and having boiled to one half, strain and add the sugar; then evaporate to Oiij., and while the syrup is still hot, dissolve it in the tartrate of antimony and potassa.)—*U. S. Phar.*

Use. In croup, and as an expectorant in pulmonary and catarrhal affections.

SYRŪPUS SENEGÆ. U. S. *Syrup of Seneka.* (Take of *Seneka* bruised ℥iv., *Water* Oj., *Sugar* ℔j. Boil the water with the seneka to one half, and strain; then add the sugar, remove the scum, and strain.)—*U. S. Phar.*

Oper. A very useful expectorant.

Use. In bronchial and pulmonary affections.

Dose. fʒss. to fʒij.

SYRUPUS SIMPLEX. E. Simple Syrup. (*Pure Sugar* ℔x., *Boiling Water* Oiij.)

Use. To sweeten nauseous mixtures.

SYRŪPUS TOLUTĀNUS. U. S.—L. E. D. Syrup of Tolu. (*Balsami Tolutani* ʒx., *Aq. Ferv.* Oj., *Sacch. Pur.* ℔ijss. Boil the balsam for half an hour in a covered vessel, occasionally stirring; strain when cold, and add sugar to the liquor so as to form a syrup.)

Use. Simply to give its agreeable flavor to draughts, mixtures, and emulsions.

Dose. fʒj. to fʒiv.

SYRŪPUS VIŎLÆ. E. Syrupus Violæ, D. Syrup of Violets (*Florum recent. Violæ Odor.* ℔j., *Aq. Bull.* Oijss., *Sacch Pur.* ℔vijss. Macerate in a covered vessel for twenty-four hours; strain, without expression, through linen; add the sugar so as to form a syrup.) *Syrupus Violarum.*

Oper. Very gently laxative.

Use. To children, and to impart its blue color to fluid mixtures &c.

Dose. fʒj. to fʒij.

Incomp. Acidulated and alkalized fluids, if it be wished to preserve the color.

SYRŪPUS ZINGIBERIS. U. S.—L. E. D. Syrup of Ginger. (*Zingiberis concisæ* ℥ ijss., *Aquæ Ferv.* 0j., *Sacch. Purif.* ℔iijss. To the strained liquor add the sugar, so as to form a syrup.)

Oper. Cordial, stomachic, carminative.

Use. As an adjunct to bitter and tonic infusions.

Dose. ʒj. to ʒiij.

TABĂCUM. U. S.—L. E. Nicotianæ Tabaci Folia, D. The Leaves of Tobacco. (*Pentand. Monogyn.* N. O. *Solanaceæ.* America. ⊙.)

Prop. Odor of the dried leaves, strong, fetid, narcotic; taste bitter, extremely acrid; burns with a sparkling light, owing to the nitrate of potassa which it contains. Active principles, a volatile oil, which is soluble both in water and alcohol, and *nicotina*, a peculiar substance, on which its virtues are supposed to depend.

Oper. Narcotic, sedative, diuretic, emetic, cathartic, errhine, a violent poison, whether externally applied, or taken into the stomach.

Use. In ileus, and incarcerated hernia, in the form of clyster of the infusion, or the smoke; in dropsy and dysuria; chewing it relieves the pain of toothache; and, as an errhine, it forms the basis of all the snuffs in common use. The infusion has been used as a lotion in scabies, tinea capitis, and other eruptions; but it is apt to induce sickness.

Dose. See *Infusum Tabaci* For clysters, ʒj. is infused in 0j. of boiling water.

Off. Prep. *Vinum Tabaci*, U. S.—E.

TAMARINDUS. U. S.—L. E. Tamarindus, Leguminis Pulpa, D. The Pulp of the Tamarind. (Tamarindus *Indica*, the Tamarind Tree. *Monadelph. Triand.* N. O. *Leguminosæ.* East and West Indies. ♄.)

Prop. Inodorous; taste acid, sweet; juicy when fresh and good; the seeds are hard; and the blade of a knife thrust into the pulp, should not become coated with copper. The pulp contains citric acid 9.40, tartaric acid 1.55, malic acid 0.45, bitartrate of potassa 3.25, gelatine, mucilage, pectin, fecula, and sugar.

Oper. Laxative, refrigerant.

Use. In dysentery and fevers, particularly those attended with an increased secretion of bile, and putrid symptoms. Tamarind whey, made by boiling ℥ij. of the fruit with 0jss. of milk, and straining, is an excellent diluent in fevers.

Dose. ʒss. to ʒij. often added to senna and to manna.

Incomp. Carbonates, and acetates of potassa and soda: the resinous cathartics; infusum sennæ.

TĀNACĒTI FOLIA. U. S.—D. Leaves of Tansy. (*Syngen. Polygam. Superfl.* N. O. *Compositæ.* Europe. ♃.)

Prop. Odor peculiar, strong; taste warm, bitter.

Oper. Tonic, deobstruent, anthelmintic.

Use. In gout; hysteria, connected with suppression of the menses; in worms seldom used.

Dose. ℥ss. to ʒj. It is drunk as tea by gouty people.

TAPIOCA. U. S.—E. Tapioca. (Fecula of the rhizomes of *Jatropha Manihot.*) A modification of starch

Prop. Occurs in the form of irregular, hard, white, rough grains, possessing little taste, partially soluble in cold water, and affording a fine blue color when iodine is added to its filtered solution. The tapioca meal, sometimes called Brazilian arrowroot, is the fecula, dried without heat; nutritious, easy of digestion, and free from all irritating properties, tapioca forms an excellent diet for the sick and convalescent. Prepared by boiling in water, adding sugar, lemon juice, wine, nutmeg, or cinnamon, to suit the taste.

TARAXACUM. U. S.—L. E. Taraxaci Herba et Radix, D. Taraxacum. (Dens Leonis.) The Root of Dandelion. (*Syngen. Polygam. Æqual.* N. O. *Compositæ.* Indigenous. ♃.)

Prop. Inodorous; taste at first slightly sweetish and acidulous, then bitter.

Oper. Aperient, diuretic, resolvent.

Use. In chronic inflammation, and incipient scirrhus of the liver; chronic derangements of the stomach; dropsy; pulmonary tubercles; and jaundice.

Dose. f℥ ij. of the following decoction three or four times a day: ℞ The full-grown roots sliced ℥ iv., water Oij. Boil gently to a pint, strain, and add bitartrate of potassa ʒ iij.

Incomp. Infusion of galls, nitrate of silver, bichloride of mercury, acetates of lead, sulphate of iron.

TARTARUM. L. Tartari Crystalli, D. Tartar. (Potassæ Bitartras Impura.) Encrusted on wine casks.

Comp. Potassa, tartaric acid, and generally lime.

Prop. Taste acid, rather unpleasant; color dirty white, red, or brown, according to the nature of the wine depositing it. It is brittle, soluble in cold water, but much more so in boiling water; decomposed by heat.

Use. For the preparation of bitartrate of potassa.

TEREBINTHINA CANADENSIS. U. S.—L. Balsamum Canadense, E. Resina Liquida Pini Balsameæ, D. Canada Balsam. (Pinus *Balsamea,* Norway Spruce Fir. *Monœcia, Monadelphia.* N. O. *Coniferæ.* Canada. ♄.)

TEREBINTHĬNA CHIA. L. E. Resina Liquida Pistaciæ Terebinthini, D. Cyprus Turpentine. (Pistacia *Terebinthus. Diœcia, Pentand.* N. O. *Terebinthaceæ.* South of Europe ♃.)

TEREBINTHĬNÆ OLĔUM. U. S.—L. E. Oil of Turpentine. The volatile oil.

TEREBINTHĬNA VENETA. E. Resina Liquida Pini Laricis, D. Venice Turpentine. (Pinus *Larix.* The Larch. Class and Order of P. Balsamea. South of Europe. ♄.)

TEREBINTHĬNA. U. S.: **VULGARIS.** E. L. Terebinthina Vulgaris; Resina, D. Common Turpentine. (Pinus *sylvestris.* Scotch Fir. North of Europe. ♄.)

All these turpentines have properties in common, with something peculiar to each; the three former are used internally, the latter only externally.

Comp. Resin, volatile oil; the Canadian contains the largest proportion of oil. The rectified oil is the *Camphene* of chemists

Prop. Odor penetrating; taste warm, pungent, bitterish; color pale yellow. The Canadian and Chian are thin, limpid, transparent; the other two thicker, viscid, and less transparent soluble in æther and alcohol; combine with fixed oil; insoluble in water, but impart to it their flavor.

Oper. Stimulant, diuretic, cathartic.

Use. In chronic rheumatism, gleet, leucorrhœa, nephritic affections, and mucous obstructions of the urinary organs. United with water by means of yolk of egg, they are given clysterways in colic, obstinate costiveness, and to destroy ascarides. The latter kind enter into the composition of plasters.

Dose. ℈j. to ʒj. in pills or bolus, united with powder of liquorice root; or emulsion, with mucilage or yolk of egg.

Off. Prep. *Oleum Terebinthinæ*, U. S.—L. E. D. *Oleum Terebinthinæ purificatum*, L. *Enema Terebinthinæ*, D. *Emplastra et Unguenta Varia*, U. S.

TESTÆ. U. S—L. Oyster Shells. (Ostrea *edulis*, the Oyster. Cl. *Vermes*. Ord. *Testacea*, *L. Mollusca*, *Acephala*, Cuv.)

Comp. Carbonate of lime and animal matter, the latter of which is destroyed when the shell is burnt, and pure lime remains.

Oper. Antacid, absorbent.

Use. Chiefly in the acidities of infancy; and during dentition.

Dose. Gr. x. to ʒij.

TESTÆ PRÆPARATÆ. L. Prepared Shells. (Wash the shells freed from sordes with boiling water, then prepare them in the same manner as chalk.)

TIGLII OLĔUM. U. S.—L. Crotonis Olei, E. Croton Tiglii. Oleum ex Seminibus Expressum, D. Oil of Croton. (Croton *Monœcia*, *Monadelphia*. N. O. *Euphorbiaceæ*. Moluccas. ♄.) An expressed oil.

Prop. Color pale brownish-yellow; odor none; taste acrid, and extremely permanent.

Oper. Drastic, purgative.

Use. In apoplexy, obstinate costiveness, and whenever a quick and powerful action on the bowels is required.

Dose. From ♏j. to ♏v. made into pills with crumb of bread; or rubbed up with mucilage and syrup.

TINCTŪRA ACETĀTIS FERRI. D. Tincture of Acetate of Iron. (*Acetatis Kali* ℥ij., *Sulphatis Ferri* ʒj., *Spir. Rectif.* Oij. Rub the acetate and sulphate into a soft mass, then dry it with a moderate heat, and afterwards triturate with the spirit. Digest in a well-corked phial for seven days, shaking occasionally Pour off the clear liquor, after the fæces have subsided.) A spirituous solution of a mixed acetate.

Prop. Taste extremely styptic.

Oper. Tonic, astringent.

Use. In dyspepsia, chlorosis, hysteria, and rachitis.

Dose ♏xx. to fʒj. in a glassful of water.

TINCTURA ACETATIS FERRI CUM ALCOHOLE. D Tincture of Acetate of Iron with Alcohol. (*Sulphatis Ferri*, *Acetatis Kali*, *sing.* ℥j., *Alcoholis* Oij. Prepared in the same manner as the former.)

Comp. Red oxide of iron, acetate of potassa, alcohol.

Prop., *Use*, *&c.* The same as the former preparation.

TINCTŪRA ACETĀTIS ZINCI. D. Tincture of Acetate of Zinc. (*Zinci Sulphatis*, *Potassæ Acetatis*, utriusque partem j., *Spir. Rectificati* partes xvj Rub together the sulphate and acetate, and add the spirit. Macerate for a week, occasionally agitating, and filter through paper.)

TINCTŪRA ACONITI. Tincture of Aconite. (*Aconiti* ℥iv *Diluted Alcohol* Oij. Macerate fourteen days, express, and filter through paper. Or by displacement.)—*U. S. Phar.*

Oper. Revellent, excitant.

Use. Externally in palsy, amaurosis, &c.

TINCTŪRA ALOES. U. S.—L. E. D. Tincture of Aloes. (*Aloes cont.* ℥j., *Ext. Glycyrrhizæ* ℥iij., *Aquæ* Ojss., *Spir. Rect.* Oss. Macerate for fourteen days, and strain.)

Oper. and *Use.* The same as of the extract of aloes.

Dose. f℥ss. to f℥jss.

TINCTURA ALOES ÆTHERĚA. E. Æthereal Tincture of Aloes. (*Gummi Res. Aloes Socot.*, *Gummi Res. Myrrhæ, sing.* ℥jss., *Croci Anglici con.* ℥j., *Ætheris Sulphurici cum Alcohole* ℔j. Digest the myrrh in the æthereal spirit for four days, then add the aloes and saffron, and digest for four days more.) *T. Aloes Vitriolata.*

Oper. Stimulant, cathartic.

Use. In the same cases for which the other aloetic tinctures are used; and spasms of the stomach.

Dose. fʒj. to fʒij.

TINCTURA ALOES COMPOSITA. L. D. Tinctura Aloes et Myrrhæ. U. S.—E. Compound Tincture of Aloes. Elixir Proprietatis. (*Aloes cont.* ℥iv., *Croci* ℥ij., *Tinct. Myrrhæ* Oij. Digest fourteen days, and strain.)

Oper. Purgative, stomachic, emmenagogue.

Use. To open the bowels in languid cold habits; in chlorosis.

Dose. fʒj. to fʒij.

TINCTŪRA AMMONIÆ COMPOSITÆ. L. Compound Tincture of Ammonia. (*Mastiche* ʒij., *Spir. Rectificat.* fʒix., *Lavand. Olei* ♏xiv., *Succini Olei* ♏iv., *Liquoris Ammoniæ fort.* Oj. Macerate the mastich in the spirit, and decant the tincture; then add the other articles, and shake all together.)

Oper. Stimulant, antispasmodic.

Use. In pertussis, hysteria, and nervous affections.

Dose. ♏v. to ♏xx.

Incomp. Acids, acidulous and metallic salts.

TINCTŪRA ANGUSTURÆ. D. Tinctura Angustura. (*Cort. Angusturæ, in pulv. crass. redacti* ℥ij., *Spir. Vinosi Tenuioris* Oij. Digest for seven days.)

Oper. and *Use.* The same as of the Bark. See *Cuspariæ Cortex.*

Dose. ʒj. to ʒij.

TINCTURA ASSAFŒTIDÆ. U. S.—L. E. D. Tincture of Assafœtida. (*Assafœtidæ* ℥v., *Spir. Rectif.* Oij. Macerate for fourteen days, and filter.)

Oper. and *Use.* The same as of Assafœtida.

Dose. ♏x. to fʒj. (It becomes turbid when mixed with water.)

TINCTURA AURANTĬI. L. E. Tincture of Orange Peel. (*Aurantii Cort. exsiccati* ℥iijss., *Spir. Tenuioris* Oij. Macerate for fourteen days, and filter.)

Oper. Stomachic.

Use. As an adjunct to bitter stomachic draughts.

Dose. fʒss. to ʒij. or more.

TINCTŪRA BALSAMI TOLUTA See *Tinctura Toluiferæ Balsami.*

TINCTŪRA BENZOINI CO Tinct

Benzoes Composita, D. enzoin

(*Benzoini* ℥ iijss., *Styracis colati* f℥ ijss., *Balsami Tolutani* ʒ x., *Aloes* ʒ v., *Spiritus Rect.* Oij. Macerate for fourteen days.)

Oper. Stimulant, expectorant, antispasmodic.

Use. In old asthmatic cases; chronic catarrh; phthisis with a languid circulation. It is applied to wounds and languid ulcers, which it stimulates gently, and covers from the action of the air.

Dose. fʒ ss to fʒ ij. rubbed up with yolk of egg, and any fluid.

TINCTŪRA BUCHU. E. D. Tincture of Buchu. (*Buchu* ℥ ijss., *Spiritus Tenuioris* mensura ℔j. Macerate for seven days, and strain.)

Use. The same as that of the leaves.

Dose. From ʒ j. to f℥ iv.

TINCTŪRA CALUMBÆ. L. E. Tinct. Colombo, U. S.—L. Tincture of Calumba. (*Calumbæ concisæ* ℥ iij., *Spir. Tenuior.* Oij. Macerate for fourteen days, and strain.)

Oper. and *Use.* The same as of the root; but more easily borne on the stomach than either the powder or the infusion.

Dose. fʒ ss. to fʒ iv.

TINCTŪRA CAMPHŎRÆ. U. S.—L. E. D. Tincture of Camphor. (*Camphoræ* ℥ v., [℥ j. E.], *Spir. Rect.* Oij. [f℥ xvj. E.] Mix, that the camphor may be dissolved.)

Oper. Anodyne.

Use. A useful topical application in rheumatic and other pains.

TINCTŪRA CAMPHŎRÆ COMPOSITÆ. L. Tinct. Opii Camphorata, U. S.—E. D. Compound Tincture of Camphor. (*Camphoræ* ℈ ijss., *Opii Duri cont.*, *Acidi Benzoini*, *sing.* gr. lxxij., *Anisi Olei* fʒ j., *Spir. Ten* Oij.) *T. Opii Camphorata* f℥ j. contains nearly gr. ij. of opium

Oper. Anodyne.

Use. In catarrh, after the inflammatory symptoms are abated, to allay the tickling cough; chronic asthma; pertussis; and in cases where quiet, rather than sleep, is required.

Dose. fʒ j. to fʒ iij. at bed-time, using after it the inhaler; to children ♏ v. to ♏ xx. in almond mixture.

TINCTŪRA CANTHARIDIS. U. S.—L. E. D. Tincture of the Spanish Fly. (*Cantharidis contus.* ʒ iv., *Spir. Ten.* Oij.)

Oper. Diuretic, stimulant, narcotic.

Use. In gleet, hydrops ovarii, and leucorrhœa; but it is chiefly used as an external application, united with *Soap* or *Camphor Liniment*, against rheumatic and other pains. We have found it a useful application in that peculiar species of mortification of the extremities which sometimes takes place without any apparent cause; and to frost-bitten parts.

Dose. ♏ x. to fʒ j.

TINCTŪRA CAPSĬCI. U. S.—L. E. D. Tincture of Capsicum (*Capsici* ʒ x., *Spir. Ten.* Oij.)

Oper. Stimulant.

Use. In the low stage of typhus, cynanche maligna, and other diseases of debility. In gargles in malignant cynanche.

Dose. fʒ ss. to fʒ j. or more. fʒ ij. in a gargle of f℥ vi.

TINCTŪRA CAPSĬCI ET CANTHARIDUM. U. S. Tincture of Cayenne Pepper and Blistering Flies. (*Cantharidum contusarum* ʒ x., *Capsici* ʒ j., *Alcoholis diluti* Oj. Digest for ten days, and filter.)

Oper. Stimulant, rubefacient.

Use. As a counter-irritant in deep-seated painful affections.

TINCTURA CARDAMOMI. U. S.—L. E. Tincture of Cardamoms. (*Cardam. contus.* ℥ iijss., [℥ ivss. E.], *Spir. Ten.* Oij.)

Oper. and *Use.* The same as of the seeds.

Dose. fʒj. to fʒij. or more.

TINCTURA CARDAMOMI COMPOSITA. L. E. D. Compound Tincture of Cardamoms. (*Cardam., Carui contrit., sing.* ʒ ijss., *Cocci contriti* ʒj., *Cinnam. cont.* ʒ v., *Uvarum* ℥ v., *Spir. Ten.* Oij.)

Oper. Stomachic, carminative.

Use. An elegant adjunct to stomachic infusions, and to jalaps; a good corrective to griping, or cold purgatives.

Dose. f℥j. to fʒij.

TINCTURA CASCARILLÆ. L. E. D. Tincture of Cascarilla. (*Cascarillæ contriti* ℥ v., *Spir. Ten.* Oij.)

Oper. and *Use.* The same as of the bark.

Dose. fʒj. to fʒij. in any convenient vehicle.

TINCTURA CASSIÆ. E. Tincture of Cassia. (*Cassia in fine powder* ʒ xvij., *Proof Spirit* Oij.)

Prop. and *Use.* The same as those of Tincture of Cinnamon.

TINCTURA CASTOREI. U. S.—L. E. T. Castorei Rossici, D. Tincture of Castor. (*Castorei cont.* ℥ ijss., *Spir. Rectificati* Oij. Macerate for fourteen days.)

Oper. Tonic, antispasmodic.

Use. In the neuroses, hysteria, and spasmodic affections.

Dose. ♏xx. to fʒij. or more.

TINCTURA CASTOREI AMMONIATA. E. Compound Tincture of Castor. (*Castor. triti* ℥j., *Assafœtidæ* ℥ss., *Alcoholis Ammoniati* ℔j.)

Oper. Antispasmodic.

Use. In hysteria, cramp of the stomach, and flatulent colic.

Dose. fʒj. to fʒij.

TINCTURA CATECHU. U. S.—L. E. D. Tincture of Catechu (*Catechu* ℥ iijss., *Cinnam. contusi* ℥ ijss., *Spir. Ten.* Oij. Macerate for fourteen days.)

Oper. Astringent.

Use. In chronic dysentery and diarrhœa; leucorrhœa, and debilities.

Dose. fʒj. to fʒij. in wine or some bitter infusion.

TINCTURA CINCHONÆ. U. S.—L. E. D Tincture of Cinchona. (*Cinchonæ Cordifoliæ cont.* ℥ viij., [℥ iv. E.], *Spir. Ten.* Oij., [Oj. E.])

Oper. and *Use.* The same as of the bark; but owing to the quantity required to be exhibited to produce the effect of cinchona, the infusion or decoction is preferred.

Dose. fʒj. to fʒiij. or more.

TINCTURA CINCHONIÆ. F. Tincture of Cinchonia. (Take of sulphate of cinchonia gr. viij., alcohol f℥j.)

Dose. From fʒj. to ʒiv.

TINCTURA CINCHONÆ AMMONIATA. E. Ammoniated Tincture of Bark. (*Cinchonæ Lancifoliæ Cort. cont.* ℥iv., *Spiritus Ammoniæ Arom.* Oij. Macerate for ten days.)

Use. In dyspepsia combined with acidity and languor.

Incomp. Acids; acidulous, earthy, and metallic salts.

Dose ♏xxx. to fʒjss.

TINCTURA CINCHONÆ COMPOSITA. U. S.—L. E. D.

Compound Tincture of Cinchona. (*Cinchonæ Lancifoliæ cont* ℥ iv., *Aurant. Cort exsiccati* ℥ iij., *Serpentariæ cont.* ʒ vj. *Croci cont.* ʒ ij., *Cocci cont.* ʒ j., *Spirit. Ten.* Oij. Macerate for fourteen days, and filter.)

Oper. Tonic, antiperiodic, diaphoretic.

Use. The same as the former; but it is more grateful, and therefore more frequently used in dyspepsia: and as an adjunct to disulphate of quina in agues.

Dose. f ʒ j. to f ʒ iij.

TINCTŪRA CINNAMŌMI. U. S.—L. E. D. Tincture of Cinnamon. (*Cinnamomi contusi* ℥ iijss., *Spirit. Tenuioris* Oij.)

Oper. Astringent, stomachic.

Use. As an adjunct to astringent infusions; in chronic diarrhœa and dysentery; in dyspepsia, added to bitter infusions.

Dose. f ʒ j. to f ʒ ij.

TINCTŪRA CINNAMŌMI COMPOSITA. U. S.—L. E. D Compound Tincture of Cinnamon. (*Cinnam. cont.* ℥ j., *Cardam. cont.* ℥ ss. *Piperis Longi cont., Zingiberis cont., sing.* ʒ ijss., *Spir. Ten.* Oij.)

Oper. and *Use.* The same as the simple tincture; but it is more cordial, and therefore more useful in languors and weakness.

Dose. f ʒ j. to f ʒ ij.

TINCTŪRA COLCHICI. U. S.—L. E. D. Tincture of Colchicum. (*Seminum Colchici Autumnalis* ℥ v., *Spiritus Tenuioris* ℔ij. Macerate for fourteen days, and then strain.)

Oper. and *Use.* The same as those of the dried bulb.

Dose. From ♏x. to ʒ j.

TINCTURA COLCHICI COMPOSITA. L. Compound Tincture of Colchicum. (*Colchici Seminum cont.* ℥ v., *Spiritus Ammoniæ Aromatici* Oij. Macerate for fourteen days, and strain.)

TINCTŪRA CONII. U. S.—L. E. Tinct. Conii, D. Tincture of Hemlock. (*Conii Fol. siccat.* ℥ v., *Cardamomi contus.* ℥ j., *Spir. Ten.* Oij.)

Use. The same as that of the leaves and extract.

TINCTŪRA CROCI. E. D. Tincture of Saffron. (*Croci Anglici con.* ℥ j., *Alcoholis Diluti* f ℥ xv. Digest seven days, and filter through paper.)

Oper. Stimulant, diaphoretic.

Use. As an adjunct to mixtures in typhoid fevers, and to camphor mixture in nervous languors.

Dose. f ʒ j. to f ʒ iij.

TINCTŪRA CUBEBÆ. U. S.—L. Tincture of Cubebs. (*Cubebæ cont.* ℥ v., *Spiritus Rect.* Oij. Macerate for fourteen days and filter.)

TINCTŪRA CUSPARIÆ. E. Tincture of Cusparia. (*Cusparia in powder* ʒ xvij., *Proof Spirit* Oj.)

Oper. Stimulant and tonic.

Use. The same as that of the bark.

Dose. f ʒ j. to f ʒ ij.

TINCTŪRA DIGITĀLIS. U. S.—L. E. D. Tincture of Foxglove. (*Digitalis Fol. exsiccat.* ℥ iv., *Spir. Ten.* Oij.)

Oper. and *Use.* The same as of the leaves. It is, perhaps, the best form under which this powerful remedy can be used, and its virtues longest preserved; but it should be made with recently dried leaves.

Dose ♏x. gradually increased to ♏xl.

TINCTURA FERRI AMMONIO-CHLORIDI. L. Tincture of Ammonio-chloride of Iron. (*Ferri Ammonio-chloridi* ℥iv., *Spir. Ten.* Oj. Dissolve the ammonio-chloride of iron in the spirit, and filter.) f℥j. contains gr. 5.8 of sesquioxide of iron.

Use. The same as the solid preparation.

Dose. fʒj. to fʒiij.

TINCTŪRA FERRI SESQUICHLORIDI. L. *Tinctura Ferri Chloridi*, U. S. Tinctura Muriatis Ferri, E. Muriatis Ferri Liquor, D. Tincture of Muriate of Iron. (*Ferri Sesquioxidi* ℥vj., *Acidi Hydrochlorici* Oj., *Spir. Rectificati* Oiij. Add the acid to the sesquioxide in a glass vessel, and shake it during three days. Add the spirit, and strain.)

Comp. Sesquichloride of iron, alcohol, water derived from the hydrochloric acid.

Prop. Taste very austere, styptic; color brownish-yellow.

Oper. Tonic, antispasmodic.

Use. Besides the cases for which salts of iron are usually employed, this tincture has been found serviceable in dysury, depending on spasmodic stricture of the urethra, in small doses repeated every fifteen minutes, till nausea be produced. It is also applied as a styptic to bleeding vessels in cancerous and loose fungous sores.

Dose. ♏x. gradually increased to fʒj.

Incomp. Alkalies, lime-water, magnesia, and their carbonates; astringent vegetable infusions and decoctions; mucilage of acacia.

TINCTŪRA GALBANI. D. Tincture of Galbanum. (*Galbani min. concisi* ℥ij., *Spir. Vin. Ten.* Oij.)

Oper. Stimulant, antispasmodic.

Use. In hysteria, flatulent colic, and chronic asthma.

Dose. f℥j to fʒiij.

TINCTŪRA GALLÆ. U. S.—L. D. Tinctura Gallarum, E. Tincture of the Gall. (*Gallæ contrit.* ℥v., *Spir. Vini Ten.* Oij.)

Oper. Astringent.

Use. In intestinal hæmorrhages, and those of the prostate gland, obstinate protracted diarrhœa, and dysentery.

Dose. fʒj. to fʒij.

TINCTURA GENTIANÆ COMPOSITA. U. S.—L. E. D. Compound Tincture of Gentian. (*Gentianæ concisæ* ℥ijss., *Aurant. Cort. exsiccat.* ʒx., *Cardamomi contusi* ʒv., *Spir. Ten.* Oij.)

Oper. Tonic, stomachic.

Use. An elegant adjunct to stomachic infusions.

Dose. fʒj. to fʒij.

TINCTŪRA GUĀIĂCI. U. S.—L. E. D. Tincture of Guaiacum. (*Guaiaci Res. cont.* ℥vij., [℥iij. E.], *Spir. Rect.* Oij., [f℥xvj. E.])

Oper. Stimulant, sudorific, laxative.

Use. In rheumatic and arthritic cases.

Dose. fʒj. to fʒiij., triturated with mucilage, or some viscid substance, as water alone precipitates the guaiacum.

TINCTŪRA GUĀIĂCI COMPOSITA. L. D. Tinctura Guaiaci Ammonia, U. S.—E. Compound Tincture of Guaiacum. (*Guaiaci Resinæ cont.* ℥vij., *Spir. Ammoniæ Aromat.* Oj.)

Oper. Stimulant, sudorific, antispasmodic.

Use. In chronic rheumatism, for which it is more particularly adapted than the former preparation.

Dose. fʒ ss. to fʒ j. in milk or any viscid fluid.

Incomp. Nitrous acid, sweet spirit of nitre, solution of chlorine

TINCTŪRA HELLĔBŌRI. U. S.—L. D. Tincture of Black Hellebore. (*Hellebori concisæ* ℥ v., *Spir. Ten.* Oij.)

Oper Alterative, emmenagogue, purgative.

Use. In uterine obstructions in full plethoric habits, where chalybeates would be hurtful; in cutaneous eruptions.

Dose. fʒ ss. to fʒ j. in water, twice a day.

TINCTŪRA HYOSCYĂMI. U. S.—L. E. D. Tincture of Henbane. (*Hyoscyami Fol. exsiccat.* ℥ v., *Spir. Ten.* Oij.)

Oper. Narcotic, anodyne.

Use. To produce sleep and quiet in those cases for which laudanum is used. It does not affect the head, nor occasion costiveness.

Dose. ♏xxx. to fʒ ij.

TINCTURA IODINII. U. S.—E. Tincture of Iodine. (*Iodine* ℥ j, *Rectified Spirit* f℥ xvj.)

Comp. A simple alcoholic solution of the iodine.

Use. The same as that of iodine.

TINCTURA IODINII COMPOSITA. U. S.—L D. Compound Tincture of Iodine. (*Iodinii* ʒ j., *Potassii Iodidi* ℥ ij., *Spiritus Rectificati* Oij. Dissolve the iodine, and filter. Preserve the mixture in a closely-stoppered vessel.

Use. In scrofula, bronchocele, and chlorosis.

Dose. From ♏x. to ♏xxx., in a little syrup and water, three times a day.

TINCTŪRA JALĂPÆ. U. S.—L. E. D. Tincture of Jalap. (*Jalapæ cont.* ℥ x., *Spir. Ten.* Oij.)

Oper. Cathartic.

Use. As an adjunct to purgative draughts.

Dose. fʒ j. to fʒ iv.

TINCTŪRA KINO. L. E. D. Tincture of Kino. (*Kino contriti* ℥ iijss., *Spir. Rect.* Oij.)

Oper. Astringent.

Use. In chronic diarrhœa, dysentery, fluor albus, and lientery.

Dose. fʒ j. to fʒ ij.

TINCTŪRA LACTUCARII. E. Tincture of Lactucarium. (*Lactucarium in powder* ℥ ij., *Proof Spirit* Oj.)

Use. A convenient mode of administering the lactucarium in fluids.

Dose. fʒ ss. to fʒ j.

TINCTŪRA LAVANDULÆ COMPOSITA. L. Spiritus Lavandulæ Compositus, E. Compound Tincture of Lavender. (*Spir. Lavand.* Ojss., *Spir. Rosmarini* Oss., *Cinnamomi cont.*, *Myristicæ cont.*, *sing.* ʒ ijss., *Pterocarpi cont.* ʒ v.)

Use. In fainting and chronic debility.

Dose. ♏xxx. to fʒ j.

TINCTURA LOBĔLIÆ. U. S.—E. Tincture of Lobelia (*Lobelia in powder* ℥ iv., *Proof Spirit* Ojss.)

Oper. Emetic, diuretic, expectorant.

Use. For the administration of the lobelia in minute doses in spasmodic asthma.

Dose. ♏xx. to fʒ j.

TINCTURA LOBĔLIÆ ÆTHEREA. E. Æthereal Tincture of Lobelia. (*Lobelia in powder* ℥iv., *Spirit of Sulphuric Æther* Ojss.)

Use. The same as the alcoholic tincture; in asthma, croup, pertussis.

TINCTURA LUPULI. U. S.—L. E. Tinctura Humuli, D. Tincture of Hops. (*Lupuli* ℥vj., *Spir. Ten.* Oij.)

Oper. Tonic, sedative.

Use. In gout and rheumatism?

Dose. f ʒj to f ʒiij.

TINCTURA MOSCHI. D. Tincture of Musk. (*Moschi in pulv. redacti* ʒij., *Spir. Vini Rect.* Oj.)

Oper. and *Use.* The same as of musk.

Dose. f ʒj. to f ʒjss.

TINCTURA MYRRHÆ. U. S.—L. E. D. Tincture of Myrrh (*Myrrhæ contusæ* ℥iij., *Spir. Rect.* Oij.)

Oper. Tonic, deobstruent, antiseptic, detergent.

Use. In the same cases as the powder; but it is chiefly used externally, united to infusion of roses and acids, in gargles; applied to foul ulcers, and exfoliating bones; and as a wash for the mouth when the gums are spongy.

Dose. f ʒss. to f ʒj.

TINCTURA NUCIS VOMICÆ. D. Tincture of Nux Vomica. (*Fructus Strychnos Nucis Vomicæ rasi* ℥ij., *Spiritus Rectificati* ℥viij. Macerate for seven days; then strain.)

Dose. From ♏v. to ♏xx.

TINCTURA OPII. U. S.—L. E. D. Tincture of Opium. (*Opii duri contriti* ℥iij., *Spir. Ten.* Oij.) Nineteen minims contain one grain of opium.

Oper. Anodyne.

Use. To allay pains, relax spasms, and procure sleep. Externally this tincture has a considerable effect when it is rubbed upon the skin, as we have seen in a case of repeated temporary lock-jaw, which always yielded to it. In fever it should be given when moisture begins to appear on the skin.

Dose. ♏x. to ♏xxx. or more.

Incomp. Liquor ammoniæ; potassæ, carbonas potassæ; sodæ; metallic salts; astringent vegetable infusions and decoctions.

⁂ In tetanus, and other violent affections, the quantity of laudanum that can be borne by the constitution is almost incredible. Currie gave f℥vss. in twenty-six hours; see *Reports on Cold Water, &c.*

TINCTURA OPII AMMONIATA. E. Ammoniated Tincture of Opium. (*Acidi Benzoici, Croci concisi, sing.* ʒiij., *Opii* ʒij., *Olei Anisi* ʒss., *Alcoholis Ammoniati* Oj.) f ʒj. contains gr. j of opium.

Oper. Anodyne, antispasmodic.

Use. In pertussis, and to allay the tickling cough in catarrh.

Dose. f ʒss. to ʒij.

TINCTURA PIPERIS CUBEBÆ. D. Tincture of Cubebs. (*Fructus Piperis Cubebæ* ℥iv., *Spir. Tenuioris* ℔ij. Macerate for fourteen days, and strain.)

Use. The same as that of the entire pepper.

Dose. From ♏x. to f ʒj.

TINCTURA QUASSIÆ. U. S.—E. D. Tincture of Quassia. (*Scob. Ligni Quassiæ* ℥j., *Spir. Vin. Ten.* Oj. f℥xvj.)

Oper. Tonic.

Use. As an adjunct to stomachic infusions; or taken, diluted with water, in dyspepsia and other cases of debility.

Dose. fʒj. to fʒij.

TINCTURA QUASSIÆ COMPOSITA. E. Compound Tincture of Quassia. (*Cardamom Seeds bruised, Cochineal bruised, of each* ʒij., *Cinnamon in powder, Quassia in chips, of each* ʒiij., *Raisins* ℥iv., *Proof Spirit* Oj. f℥ij.)

Oper. Tonic and stimulant.

Use. In atonic dyspepsia.

Dose. fʒj to fʒij.

TINCTURA QUINÆ. F. Tincture of Quina. (Take of sulphate of quina gr. vj., alcohol (.847) f℥j.)

Dose. fʒj. to fʒiij.

TINCTURA RHEI. U. S.—E. Tincture of Rhubarb. (*Rhubarb powdered* ℥iij., *Cardamom Seeds bruised* ʒiv., *Proof Spirit* Oj. f℥xvj.)

Use. The same as the Compound Tincture of Rhubarb.

TINCTURA RHEI COMPOSITA. L. D. Compound Tincture of Rhubarb. (*Rhei concisæ* ℥ijss., *Glycyrrhizæ contusæ* ʒvj *Zingiberis concisæ, Croci, sing.* ʒiij. *Spir. Ten.* Oij.)

TINCTURA RHEI ET ALOES. U. S.—E. Tincture of Rhubarb and Aloes. (*Rad. Rhei Palmati con.* ʒx., *Aloes Soc. cont. tritæ* ʒvj., *Sem. Cardamomi cont.* ℥ss., *Alcoholis Diluti* Oj f℥xvj.)

TINCTURA RHEI ET GENTIANÆ. U. S.—E. Tincture of Rhubarb and Gentian. (*Rad Rhei Palmati con.* ℥ij.—*Gentianæ Luteæ con.* ℥ss., *Alcoholis Diluti* Oj. f℥xvj.)

Oper. All these tinctures of rhubarb are stomachic or purgative according to the dose of them employed.

Use. In dyspepsia, debility of the intestines, flatulent colic, diarrhœa; and the costiveness of old people, or of cold, phlegmatic habits.

Dose. fʒj. to fʒij. as a stomachic; fʒiv. to f℥j. as a purgative

TINCTURA SANGUINARIÆ. U. S. Tincture of Blood Root (*Sanguinariæ contusæ* ℥ij., *Alcoholis diluti* Oj. Digest for ten days, and filter.)

Use. In the same cases as the powder.

Dose. From ♏x. to fʒjss.

TINCTURA SCILLÆ. U. S.—L. E. D. Tincture of Squill. (*Scillæ recen. exsiccatæ* ʒv., *Spir. Ten.* Oij.)

Oper. and *Use.* The same as of the bulb in substance

Dose. ♏x. to fʒj. in almond mixture or mucilage.

Off. Prep. *Mel Scillæ.* D.

TINCTURA SENNÆ COMPOSITA. L. E. D. Compound Tincture of Senna. (*Sennæ* ℥iijss., *Carui con.* ʒiijss., *Cardam cont* ʒj., *Uvæ* ℥v., *Spir. Ten.* Oij.)

Oper. Stomachic, carminative, cathartic.

Use. In flatulent colic; and to open the bowels in those who labor under atonic gout, and whose bowels have been weakened by hard drinking It is a useful adjunct to the infusion of senna.

Dose. fʒij. to f℥j.

TINCTURA SERPENTARIÆ. U. S.—L. E. D. Tincture o Snake Root. (*Serpentariæ cont.* ℥iijss., *Spir. Ten.* Oij.)

Oper. Tonic, stimulant, sudorific.

Use. United with infusion of cinchona in typhoid and putrid fevers; in gout; and periodic headache.

Dose. f ʒ ss. to f ʒ ij.

TINCTURA STRYCHNIÆ. F. Tincture of Strychnia. (Take of strychnia gr. iij., alcohol (at .837) f ℥ j.; dissolve.)

Use. In the same cases as those for which strychnia is used.

Dose. From ♏vj. to ♏xxiv.

TINCTURA TOLUTANI. U. S.—E. Tinctura Balsami Tolutani, D. Tincture of Balsam of Tolu. (*Balsami Toluiferæ Bal.* ℥ jss., *Alcoholis* f ℥ xvj.)

Oper. Supposed to be expectorant; corroborant.

Use. Scarcely ever used except on account of its pleasant flavor. The following is an elegant form of giving the medicine in obstinate coughs devoid of inflammatory symptoms: ℞ Tincturæ balsami tolutani f ʒ ij., mucilag. gummi acaciæ f ℥ j., aquæ distillatæ f ʒ ivss., tinct. camph. comp f ʒ iij., syr. tolutani f ʒ iij. Take two tablespoonfuls occasionally, when the cough is troublesome.

Dose. f ʒ ss. to f ʒ j. or more.

Off. Prep. *Syrup. Toluiferæ Balsami*, E. *Trochisci Glycyrrhizæ cum Opio*, E.

TINCTURA VALERIANÆ. U. S.—L. E. D. Tincture of Valerian. (*Valerianæ cont.* ℥ v., *Spir. Ten.* Oij.)

Oper. Stimulant, antispasmodic.

Use. In nervous and spasmodic affections; but it has less efficacy than the powder.

Dose. f ʒ ss. to f ʒ ij.

TINCTURA VALERIANÆ COMPOSITA. L. D. Tinctura Valerianæ Ammoniati, U. S.—E. Compound Tincture of Valerian. (*Valerianæ* ℥ v., *Spir. Ammoniæ Aromat.* Oij.)

Oper. and *Use.* The same as of the former; but, on account of the ammonia, this is more useful in hysteria.

Dose. f ʒ ss. to f ʒ ij. in milk or some bland fluid.

TINCTURA VERATRI. E. Tincture of White Hellebore. (*Rad. Veratri Albi cont.* ℥ iv., *Alcoholis Diluti* Oj.)

Oper. Emetic, cathartic; in small doses alterative, deobstruent.

Use. To excite vomiting in maniacal and apoplectic cases: it has been used in cutaneous eruptions; but it is a very unmanageable remedy, producing sometimes the most violent effects.

Dose. ♏v. to ♏x., the dose being very gradually increased.

TINCTURA ZINGIBERIS. U. S.—L. E. D. Tincture of Ginger. (*Zingiberis concisi* ℥ ijss., *Spir. Ten.* Oij.)

Oper. Stimulant, carminative.

Use. In atonic gout, when it attacks the stomach; flatulencies and as a corrigent to griping purgatives.

Dose. f ʒ j. to f ʒ iij.

TORMENTILLA. U. S. (*Secondary.*) L. E. D. Common Tormentil Root. (Potentilla *Tormentilla*. *Icosand. Polygyn.* N. O. *Rosaceæ*. Europe. ♃.) *Tormentilla Officinalis*.

Comp. Volatile oil, tannin 17, coloring matter 20, resin 0.42, cerin 0.51, myricin 0.20, gummy extractive 4.32, gum (pectin ?) 28.90, extractive 7.70, woody fibre 15, water 6.45.—*Meissner*.

Prop. Odor slightly aromatic; taste austere, styptic; roots knotty; externally blackish, internally reddish.

Comp. Its active principle is tannic acid.

Oper. Astringent.

Use. In the same cases as other astringents; but as it does not increase the heat of the body, tormentil is preferred in phthisical diarrhœas.

Dose. Gr. x. to ʒj. of the powder; or f℥ij. of the following decoction: ℞ Pulv. crass. rad. tormentillæ ℥j., aq. puræ Oj., decoque ad f℥xij. et cola.

TOXICODENDRON. U. S. (*Secondary.*) L. D. Sumach Leaves. (Rhus *Toxicodendron.* Poison Oak. *Pentandria, Trigyn.* N. O. *Anacardaceæ. Indigenous.* ♄.)

Prop. Inodorous; taste subacrid.

Comp. Gallic acid, tannic acid, and an acrid volatile matter.

Oper. Stimulant and narcotic; an acrid narcotic poison.

Use. In paralytic affections and herpetic eruptions; but in the former its efficacy is doubtful; also in dropsy and phthisis.

Dose. Gr. ss. to gr. iv. twice or thrice a day.

TRAGACANTHA. U. S.—L. E. Astragulus Creticus Gummi, D. Tragacanth. (Astragalus *Verus. Diadelphia, Decand* N. O. *Leguminosæ.* Persia. ♄.)

Prop. Inodorous; nearly insipid, impressing only a very slight bitter taste as it dissolves; color whitish; semi transparent; striated; in thin vermiform pieces; completely pulverulent in frosty weather only; does not form a smooth, uniform mucilage with water.

Oper Demulcent.

Use. Small quantities held in the mouth, and swallowed very slowly, sheathe the fauces and allay tickling cough; but it is chiefly used for pharmaceutical purposes, to suspend heavy, insoluble powders, and to impart consistency to troches.

Dose. Gr. x. to ʒj.

Incomp. Cupri sulphas, plumbi acetas, and sulphas ferri, precipitate its mucilage.

Off. Prep. *Mucilago Astragali Tragacanthæ,* E. D. *Pulvis Tragacanthæ Comp.*, L.

TRIOSTEUM PERFOLIATUM. U. S. (*Secondary.*) Fever Root. (*Pentand. Monogyn.* N. O. *Caprifoliaceæ.*) *Indigenous.*

Oper. Cathartic, emetic, diuretic.

Use. In the commencement of fevers.

Dose. ℈j. to ʒss. of the powder acts as a cathartic; of the extract, gr. x. to ℈j. It may be given with advantage combined with calomel.

TRÒCHÍSCI ACACIÆ. E. Gum Troches. (*Acaciæ* ℥iv., *Amyli* ℥j., *Sacch. Pur.* ℔j Make up the troches with rose-water.)

Oper. Demulcent.

Use. For allaying tickling cough.

Dose. Two or more, ad libitum.

TRÒCHÍSCI ACIDI TARTARICI. E. Lozenges of Tartaric Acid. (*Tartaric Acid* ʒij., *Pure Sugar* ℥viij., *Oil of Lemons* ♏x.)

Oper. Refrigerant?

Use. In febrile affections.

TRÒCHÍSCI CRETÆ. U. S.—E. Lozenges of Chalk. (*Cretæ Præpar.* ℥iv., *Acaciæ* ℥j., *Nucis Myrist.* ʒj., *Sacch. Pur.* ℥vj. Rub them together, and form them into troches with water)

Oper. Antacid, absorbent

Use Against acidity of the stomach; cardialgia.

Dose. Two, three, or more occasionally.

TRŎCHĪSCI FERRI IODIDI. Lozenges of Iodide of Iron. ℞ Ferri Iodidi ʒj. (ʒss.), Croci Pulv. ℥ss. (ʒij.), Sacchar. Alb. ℥viij. (℥iv.) ♏ Fiant Trochisci No. 240—(120.)

Dose. Six to ten daily.

TRŎCHĪSCI GLYCYRRHĪZÆ. E. Liquorice Lozenges. (*Ex. Glycyrrh.*, *Acaciæ*, *of each* ʒvj., *Sacch. Pur.* ℔j. Dissolve in warm water, strain; evaporate by a gentle heat, and form into troches.)

Oper. Demulcent.

Use. To allay tickling cough.

Dose. Two or more, occasionally.

TRŎCHĪSCI GLYCYRRHĪZÆ ET OPII. U. S. Troches of Liquorice and Opium. (Take of *Opium* in powder ℥ss., *Liquorice* in powder, *Sugar* in powder, *Gum Arabic* in powder, each ℥x., *Oil of Anise* ʒij. Mix the powders intimately; then add the oil of anise, and with water form them into a mass, to be divided into lozenges, each weighing six grains.)—*U. S. Phar.*

TRŎCHĪSCI IPECACUANHÆ. U. S. Troches of Ipecacuanha. (℞ Of *Ipecac.* in powder ℥ss., *Sugar* in powder ℥xiv, *Arrowroot* ℥iv., *Mucil. of Tragacanth.* q. s. Mix intimately, and make into troches of ten grains each.)

TRŎCHĪSCI LACTUCARII. E. Lactucarium Lozenges. (*Prepared in the same manner as Opium Lozenges.*)

Oper. Anodyne.

Use. In chronic bronchitis and coughs.

TRŎCHĪSCI MAGNESIÆ. U. S.—E. Magnesia Lozenges. (*Carb. of Magnesia* ℥vj., *Pure Sugar* ℥iij., *Nutmeg* ℈j.)

Oper. Antacid.

Use. In cardialgia, and atonic dyspepsia.

TRŎCHĪSCI MENTHÆ PIPERITÆ. U. S. Troches of Peppermint. (Take of *Oil of Peppermint* fʒj., *Sugar* in powder ℔j., *Mucil. Tragacanth.* q. s. Rub the oil of peppermint with the sugar till they are thoroughly mixed; then with the mucilage form them into a mass, to be divided into troches, each weighing ten grains.)—*U. S. Phar.*

TRŎCHĪSCI MORPHIÆ. E. Morphia Lozenges. (*Mur. of Morphia* ℈j., *Tinct. of Tolu* fʒiv., *Pure Sugar* ℥xxv.) Each lozenge should weigh gr. xv.

Oper. Anodyne. soporific.

TRŎCHĪSCI MORPHIÆ ET IPECACUANHÆ. E. Morphia and Ipecacuanha Lozenges. (*Mur. of Morphia* ℈j., *Ipecacuanha in powder* ʒj., *Tinct. of Tolu* fʒss., *Pure Sugar* f℥xxv Make into lozenges weighing fifteen grains each.)

Use. A substitute for Dover's powder.

TRŎCHĪSCI OPII. E. Opium Lozenges. (*Opii* ʒij., *Tinct Toluifera* fʒiv., *Syr. Sim.* ℥viij., *Ext. Glycyrrhizæ*, *Aq. Calida Molliti*, *Acaciæ pulv.* ℥v. First rub the opium with the tincture; then add, by degrees, the syrup and extract; afterwards mix in the powdered gum arabic; lastly, dry them into a mass, and divide into troches, each weighing ten grains.)

Oper. Demulcent, anodyne.

Use. For allaying the irritation of the fauces producing cough in protracted catarrhs.

Dose. One, allowed to dissolve slowly in the mouth, now and then. Six troches contain one grain of opium.

TROCHISCI SODÆ BICARBONATIS. E. Lozenges of Bicarbonate of Soda. (*Bicarbon. of Soda* ℥j., *Pure Sugar* ℥iij., *Gum Arabic* ʒiv.)

Use. As an antacid in cardialgia.

TUSSILAGO. U. S.—L. Tussilago *Farfara.* *Folium Flos*, D. Colts-foot. (*Syngenesia Superflua.* N. O. *Compositæ* Indigenous. ♃.)

Prop. Inodorous; taste sweetish, glutinous, subacrid.

Oper. Demulcent, expectorant.

Use. In coughs, phthisis, other pulmonary complaints, and cutaneous diseases.

Dose. ʒss. to ʒj in milk. It is more generally given in decoctions, made with a handful of the leaves boiled in two pints of water to one pint; strained, and sweetened with syrup; the dose, a teacupful occasionally.

ULMUS. U. S.—L. The inner Bark of Elm. (*Pentandria, Digynia.* N. O. *Ulmaceæ.* Europe. ♄.)

Prop. Inodorous; taste bitter, austere, mucilaginous.

Oper. Tonic, alterative, diuretic, demulcent, nutritious.

Use. In lepra, and other cutaneous affections; diarrhœa, dysentery, diseases of the urinary organs; it is generally combined with mercurials, as pilulæ hydrargyri chloridi comp. Externally as an emollient.

Dose. See *Decoction.*

Off. Prep. *Decoctum Ulmi*, L. D. *Infusum Ulmi*, U. S.

UNGUENTUM ACIDI NITROSI. E. D. Ointment of Nitrous Acid. (*Adipis Suis Scrofæ* ℔j., *Acidi Nitrosi* ʒvj. Melt the fat, and rub it into the acid gradually, until the mixture is cold.)

Prop. Color yellow, consistence firm. It contains a small portion of adipocire, fixed oil, and nitric and acetic acids.

Oper. Stimulant.

Use. Applied to foul ulcers and herpetic eruptions.

UNGUENTUM ACIDI SULPHURICI. D. Ointment of Sulphuric Acid. (*Acidi Sulphurici* ʒj., *Adipis Suilli* ℥j. Mix.)

Oper. Stimulant.

Use. Applied to the skin in scabies.

UNGUENTUM ÆRUGINIS. E. D. Ointment of Subacetate of Copper. (*Unguenti Resinosi partes* xv., *Subacetatis Cupri partem unam.*)

Oper. Detergent, escharotic.

Use. To foul, fungous, and flabby ulcers; and diluted with lard, to scrofulous ulcerations of the palpebræ.

UNGUENTUM ANTIMONII. U. S.: POTASSIO-TARTRATIS. L. Unguentum Antimoniale, E. Unguentum Tartari Emetici, D. Ointment of Potassio-Tartrate of Antimony. (*Antimonii Potassio-Tartratis in pulv. tritæ* ℥j., *Adipis* ℥iv Mix.)

Oper. As a topical stimulant, to cause a pustular eruption on the skin, and produce counter-irritation.

Use. In internal inflammations, and rheumatism of the joints.

UNGUENTUM AQUÆ ROSÆ. U. S. Ointment of Rose Water. (Take of *Rose Water*, *Oil of Almonds*, each f℥ij., *Spermaceti* ℥ss., *White Wax* ʒj. Melt together by means of a water bath, the oil, spermaceti, and wax; then add the rose water, and stir the mixture till cold.)—*U. S. Phar.*

UNGUENTUM CANTHARIDIS. U. S.—L. D. Ointment of Cantharidis. (*Cantharidis pulveris subtil.* ℥j., *Cerati Resinæ* ℥iv., *Aquæ Distillatæ* f℥iv. Boil the cantharides in the water to one-half, then mix the cerate to the strained fluid, and evaporate.

Oper. Irritant.

Use To keep open issues and blisters.

UNGUENTUM CERÆ ALBÆ. D. Ointment of White Wax. (*Ceræ Albæ* ℔j., *Adipis Suillæ Præpar.* ℔iv.)

Oper. Emollient.

Use. As a mild covering to excoriations and benign ulcers. This is the basis of the majority of the compound ointments of the Dublin Pharmacopœia.

UNGUENTUM CERÆ FLAVÆ. D. Ointment of Yellow Wax. This is prepared with the same proportions as the former, and is applicable to the same uses.

UNGUENTUM CETĀCEI. L. D. Ointment of Spermaceti (*Cetacei* ʒvj., *Ceræ Albæ* ʒij., *Olivæ Olei* f℥iij.)

Use. The ordinary dressing for blistered parts and excoriations.

UNGUENTUM COCCULI. E. Ointment of Cocculus Indicus

Use A stimulant.

UNGUENTUM CONII. D. Ointment of Hemlock. (*Foliorum Conii recentium, Adipis Suilli præparati,* utriusque ℔ij. Boil the leaves of the conium in the fat until they are crisp; then express through cloth.)

Use. As an application to cancerous and irritable or painful sores.

UNGUENTUM CREASOTI. U. S.—L. E. Ointment of Creasote. (*Creasoti* fʒj. [ʒj. E.], *Adipis* ℥j. [℥iij. E. *Creasoti* ʒss. *Lard* ℥j. U. S.] Rub and mix.)

Oper. Stimulant.

Use. As a counter-irritant, and as an application in porrigo scutulata.

UNGUENTUM CUPRI SUB-ACETATIS. U. S. Ointment of Sub-Acetate of Copper. (℞ *Sub-Acetas Cupri* ʒj., *Ceras Simpl.* ʒxv. Mix.)

UNGUENTUM ELĔMI. L. Unguentum Elemi, D. Compound Ointment of Elemi. (*Elemi* ℔j., *Terebinthinæ Vulgaris* ℥x., *Sevi* ℔ij., *Olivæ Olei* f℥ij. Melt the elemi with the suet; remove it from the fire, and mix it in the turpentine and the oil; then strain the mixture through a linen cloth.)

Oper. Stimulant, digestive.

Use. To keep open issues and setons; and as a dressing to ulcers which do not admit of the application of the adhesive straps.

UNGUENTUM GALLÆ. U. S.: **COMPOSITUM.** L. D. Unguentum Gallæ et Opii, E. Compound Ointment of Galls. (*Gallarum in pulverem subtilissimum tritarum* ʒij., *Adipis* ℥ij., *Opii duri contriti* ʒss. Mix.)

Use. As an application in piles. (The Simple Ointment of Galls is made by mixing ℥j. of powdered galls with ℥vij. of lard.)—*U. S. Phar.*

UNGUENTUM HYDRARGY̆RI. U. S.—E. D. Ointment of Mercury. (*Hydrargyri* ℔ij., *Adipis Ovis Arietis* ℥j., *Adipis* ℥xxiij.) ʒij. contain ʒj. of mercury. E.

UNGUENTUM HYDRARGÝRI FORTIUS. L. Strong Mercurial Ointment. (*Hydrarg. Pur.* ℔ij., *Adipis* ℥ xxiij., *Sevi* ℥ j.) ʒ ij. contain ʒ j. of mercury.

UNGUENTUM HYDRARGÝRI MITIUS. L. D. Milder Mercurial Ointment. ((*Ung. Hydrarg. Fort.* ℔j., *Adipis* ℔ij.) ʒ vj. contain ʒ j. of mercury.

Comp. These three ointments differ in the quantity only of their constituents, which are protoxide of mercury, metallic mercury, and fat; and perhaps in old ointments, some sebate of mercury. Mr. Donovan has proved that the efficacy of these ointments depends on the oxide which they contain, yet the preparation of them with the oxide instead of metallic mercury is not approved. By this mode of preparation, each ℥ j. of ointment contains about gr. 21 of oxide.

Oper. Antisyphilitic, alterative, discutient.

Use. In venereal affections, when it is wished to get a large portion of mercury speedily into the system without affecting the bowels; and where there are local affections, as bubo The weaker ointments are chiefly used as topical dressings to venereal ulcers.

Dose. ʒ j. of the strong ointment is introduced by friction upon the inside of the thigh, or the fore arm, every night, till the system is affected; living upon a milk and gruel diet.

UNGUENTUM HYDRARGÝRI AMMONIO-CHLORIDI. L Unguentum Precipitati Albi, E. Ointment of Ammouio-Chloride of Mercury. (*Hydrargyri Ammonio-Chloridi* ʒ j., *Adipi* ℥ jss. Melt the lard, and mix in the ammonio-chloride.)

Use. Detergent.

UNGUENTUM HYDRARGÝRI NITRATIS. U. S.—L. D Unguentum Citrinum, E. Ointment of Nitrate of Mercury Citron Ointment (*Hydrargyri* ℥ j., *Acidi Nitrici* fʒ xj., *Adipis* ℥ vj., *Olivæ Olei* f℥ iv. Dissolve the mercury in the acid; and to the liquor, while it is hot, add the fat and oil melted together.)

UNGUENTUM NITRATIS HYDRARGÝRI MITIUS. E. Milder Ointment of Nitrate of Mercury. (The same as the former, with triple the quantity of oil and lard.)

Prop. These two ointments are the same, except in point of strength; they are of a greenish-golden color; and when old, become hard and short.

Oper. Stimulant, detergent.

Use. The stronger ointment is used as an application to herpes, porrigo larvalis, and other cutaneous eruptions. The weaker is applied, by means of a hair pencil, to the edges of the eyelids, in psorophthalmia. and ulcerations of the tarsi

UNGUENTUM HYDRARGÝRI NITRÍCO-OXÍDI. L. D. Unguentum Oxidi Hydrargyri, E. Ointment of Nitric Oxide of Mercury. (*Hydrargyri Nitrico-Oxidi* ℥ j., *Ceræ Albæ* ℥ ij., *Adipis Præparatæ* ℥ vj. Add the oxide, reduced to a fine powder, to the melted fat and oil, and mix.)

Oper. Stimulant, escharotic.

Use. To indolent foul ulcers; to inflammations of the tunica conjunctiva, with a thickening of the inner membrane of the palpebræ; and to specks of the cornea.

UNGUENTUM HYDRARGÝRI IODIDI. L. Ointment of

Iodide of Mercury. (It is made in the same manner as the ointment of Nitric-Oxide of Mercury.)

UNGUENTUM HYDRARGYRI BINIODIDI. L. Ointment of Biniodide of Mercury.

Oper. Stimulant.

Use. As dressings to scrofulous and flabby sores.

UNGUENTUM IODINII. U. S. Ointment of Iodine. (*Iodine* gr. xx., *Alcohol* ♏xx., *Lard* ℥j. Rub the iodine first with the alcohol, then with the lard.)—*U. S. Phar.*

UNGUENTUM IODINII COMPOSITUM. U. S.—L. D. Unguentum Iodinii, E. Compound Ointment of Iodine. (*Iodinii* ʒss. [ʒj.], *Potassii Iodidi* ʒj. [ʒij. E.], *Spir. Rect.* fʒj., *Adipis* ℥ij. [℥iv. E.] Rub the iodide and iodine with the spirit, then add the lard. Rub together into an ointment.)

Use. As an application to scrofulous tumors and bronchocele.

UNGUENTUM MEZEREI. U. S. Ointment of Mezereon (*Mezereon* sliced transversely ℥iv., *Lard* ℥xiv., *White Wax* ℥ij. Moisten the mezereon with alcohol, beat well in a mortar, digest with the lard in a salt-water bath 12 hours, strain, and let it cool slowly. Separate the medicated lard, and melt with the wax at a moderate heat.)—*U. S. Phar.*

UNGUENTUM OXIDI PLUMBI ALBI. E. Unguentum Cerussæ, sive Subacetatis Plumbi. D. Ointment of White Oxide of Lead. (*Ung. Simplicis partes* v., *Oxidi Plumbi Albi partem* j.)

Oper. Cooling, desiccative.

Use. Applied to excoriated surfaces and burns.

UNGUENTUM OXIDI HYDRARGYRI CINEREI. E. Ointment of Grey Oxide of Mercury. (*Oxidi Hydrargyri Cinerei partem unam*, *Adipis Suis Scrofæ partes* iij.)

Oper. and *Use.* The same as of the mercurial ointment, but its efficacy is not sufficiently established.

UNGUENTUM OXIDI ZINCI IMPURI. E. Unguentum Tutiæ, D. Ointment of Impure Oxide of Zinc. (*Linimenti Simplicis partes* v., *Oxidi Zinci Impuri Præp. partem* j.)

Oper. Slightly astringent, absorbent.

Use. In ophthalmia tarsi, and inflammation of the eye arising from weakness of the vessels.

UNGUENTUM PICIS LIQUIDÆ. U. S.—L. E. D. Tar Ointment. (*Picis Liquidæ*, *Sevi*, *sing.* ℔j. Melt, and strain through linen.

Oper. Stimulant, detergent.

Use. Against lepra, and other cutaneous, scabby, and foul eruptions.

UNGUENTUM PICIS NIGRÆ. L. Ointment of Black Pitch. (℞ *Picis Nigræ*, *Ceræ Resinæ*, *sing.* ℥ix., *Olei Olivæ* ℥xvj. Melt the whole, and express it through cloth.)

Oper. Stimulant, detergent.

Use. In porrigo favosa, and other foul eruptions.

UNGUENTUM PIPĔRIS NIGRI. D. Ointment of Black Pepper. (*Adipis Suillæ Præp.* ℔j., *Piperis Nigri in pulv. triti* ℥iv.)

Oper. Stimulant, irritating.

UNGUENTUM PLUMBI ACETATIS. E. Ointment of Acetate of Lead. (*Acetate of Lead in fine powder* ℥j., *Simple Ointment* ℥v. Mix.)

Use. In irritable, inflamed sores.

UNGUENTUM PLUMBI CARBONATIS. U. S.—E. D. Ointment of Carbonate of Lead. (*Plumbi Carbonatis, in pulverem subtilissimum redacti* ℥ v., *Unguenti Simplicis* ℥ v., *Acet. Plumb.* ℥ ij., *Ung. Simp.* ℔j. Mix. U. S. Make into an ointment.)

Use. In burns and irritable sores.

UNGUENTUM PLUMBI COMPOSITUM. L. Compound Ointment of Lead. (*Cretæ Præp.* ℥ viij., *Aceti Distillati* f℥ vj., *Emplastri Plumbi* ℔iij., *Olivæ Olei* Oj. Melt the plaster with the oil with a gentle heat, then mix the chalk and the acid separately, and the effervescence being finished, add gradually, mixing constantly until the ointment is cold.)

Use. Useful in indolent sores.

UNGUENTUM PLUMBI IODIDI. L. Ointment of Iodide of Lead. (*Plumbi Iodidi* ℥ j., *Adipis* ℥ viij. Rub and mix.)

Oper. Stimulant.

Use. In glandular swellings, and enlargement of the joints rubbed on the parts.

UNGUENTUM POTASSÆ HYDRIODATIS. D. Ointment of Hydriodate of Potass. (*Potassæ Hydriodatis* ℈j., *Adipis Suilli Præparati* ℥ j. Mix into an ointment.)

UNGUENTUM RESINOSUM. E. Unguentum Resinæ Albæ, D. Resinous Ointment. (*Adipis Suis Scrofæ partes* viij., *Resini Pini partes* v., *Ceræ Flavæ partes* ij.)

Oper. Digestive, detergent.

Use. For cleansing and incarnating old, foul, and indolent ulcers.

Off. Prep. *Unguentum Subacetatis Cupri*, E. D.

UNGUENTUM SAMBUCI. L. D. Elder Ointment. (*Sambuci Florum* ℔ij., *Adipis Præp.* ℔ij.)

Oper. Emollient.

Use. As a covering to benign ulcers.

UNGUENTUM SCROPHULARIÆ. D. Ointment of Scrophularia. (*Foliorum recentium Scrophulariæ nodosæ, Adipis Suilli Præparati, utriusque* ℔ij., *Adipis Ovilli Præparati* ℔j. Boil the leaves in the fat until they are crisp, then strain with expression.)

UNGUENTUM SIMPLEX. U. S.—E. D. Simple Ointment. (*Olei Olivæ Europææ partes* v., *Ceræ Albæ partes* ij.)

Oper. Emollient.

Use. For softening the skin and healing chaps.

Off. Prep. *Unguentum Oxidi Plumbi Albi*, E. *Ung. Acetatis Plumbi*, E.

UNGUENTUM STRAMONII. U. S. Ointment of Stramonium. (℞ *Sal. Stramonii* [recent.] ℔j., *Adipis* ℔iij., *Ceræ flavæ* ℔ss. Boil the stramonium leaves in the lard till they become friable; then strain through linen. Lastly, add the wax, previously melted, and stir them until they are cold.)—*U. S. Phar.*

UNGUENTUM SUB-MURIATIS HYDRARGYRI AMMONIATUM. D. Ointment of Ammoniated Submuriate of Mercury. (*Ung. Ceræ Albæ* ℔j. *Submuriatis Hydrargyri Ammoniati* ℥ jss.)

Oper. Stimulant, detergent.

Use. Against obstinate cutaneous eruptions.

UNGUENTUM SULPHURIS. U. S.—L. E. D. Sulphur

Ointment. (*Sulphuris* ℥iij., *Adipis Præp.* ℔ss., *Bergamii Olei* ♏xx. Mix.)

Oper. Stimulant.

Use. In itch; the fourth part of the body should be well rubbed with the ointment every night, till the symptoms disappear. Sulphur should be taken internally at the same time. When the smell is objected to, the following may be used: Potassæ Subcarb. ʒiv., Aquæ Rosæ ℥j., Hydrarg. Sulph. Rubri ʒj., Ol. Lavand. fʒss., Sulph. Sublimati ℥xj., Adipis ℔jss. Misce.

UNGUENTUM SULPHŬRIS COMPOSITUM. U. S.—L. **Compound** Sulphur Ointment. (*Sulphuris* ℔ss., *Veratri cont* ℥ij., *Potassæ Nitratis* ʒj., *Saponis Mollis* ℔ss., *Adipis* ℔jss., *Bergamii Olei* ♏xxx. Mix.)

Oper. and *Use.* The same as the former. It is more stimulant.

UNGUENTUM VERĀTRI. U. S.—L. Unguentum Hellebori Albi, D. Ointment of White Hellebore. (*Veratri contriti* ℥ij., *Adipis* ℥viij., *Limonis Olei* ♏xx.)

Oper. Stimulant.

Use. In scabies and other cutaneous affections.

UNGUENTUM ZINCI. U. S.—L. E. D. Ointment of Oxide of Zinc. (*Zinci Oxydi* ℥j., *Adipis* ℥vj.)

Oper. Astringent, stimulant.

Use. In ophthalmia, acrid scabby eruptions, and excoriated nipples.

UVA. L. Uva Passæ, U. S.—E. Vitis Viniferæ Fructus Siccatus. D. Raisins. (Vitis *Vinifera.* The Vine. *Pentandria, Monogynia.* N. O. *Vites.* Temperate climates. ♄.)

Prop. Inodorous; taste subacidulous, sweet, mucilaginous

Oper. Demulcent, nutritive.

Use. As the food of the phthisical, and as an acidulous adjunct to the beverages of the sick.

UVA URSI. U. S.—L. E. Arbutus Uva Ursi, Folia, D. Leaves of Bear's Whortleberry. (Arctostaphylos *Uvæ Ursi,* Red Berried Trailing Whortleberry. *Decandria, Monogynia.* N. O. *Ericaceæ.* North of Europe. ♄.)

Prop. Nearly inodorous; taste styptic, bitterish; color of the powder brownish, yellowish-green; yields its virtues to alcohol.

Comp. Tannic, gallic acid? mucilage, resin extractive, traces of lime.

Oper. Tonic, astringent.

Use. In chronic diarrhœa and dysentery; leucorrhœa, and diabetes. It has been celebrated in calculous and nephritic complaints; but it appears to act in the same manner as other astringents, by merely allaying the pain and irritability of the bladder. In phthisis?

Dose. Of the powder, gr. xv. to fʒss.

Incomp. Salts of iron, tartar emetic, nitrate of silver, salts of lead, infusion of yellow cinchona bark.

VALERIANA. U. S.—L. E. Valerianæ Officinalis Radix, D. Wild Valerian Root. (*Triand. Monogyn.* N. O. *Valerianaceæ.* Europe. ♃.)

Comp. A volatile oil, extractive, resin, starch, mucus.

Prop. Odor strong, fetid; taste bitterish, subacrid, warm; consists of slender, brownish fibres, matted together, and attached to one head; virtues extracted by water, alcohol, pure alkalies.

Oper. Antispasmodic, tonic, emmenagogue.

Use. Hysteria, epilepsy, hemicrania, chlorosis.

Dose. Of the powder, ℈j. to ʒj. three or four times a day, increasing it as far as the stomach can bear it.

Incomp. Salts of iron.

Off. Prep. *Extractum Valerianæ*, D. *Infusum Valerianæ*, U S.—D. *Tinctura Valerianæ*, U. S.—L. D. *Tinctura Valerianæ Ammoniata*, U. S.—L. D.

VERATRIA. U. S.—L. E. Veratria. (An alkali prepared from Sabadilla. Helonias *officinalis*.)

Process. Pelletier and Caventou direct the seeds of the veratrum sabadilla to be repeatedly digested in boiling alcohol. These tinctures, filtrated whilst almost boiling, deposited, on cooling, whitish flakes of wax. They re-digested the matter which remained dissolved, after evaporating it to the consistence of an extract, in cold water; a small quantity of fatty matter now remained on the filter. The solution was slowly evaporated, and it formed an orange-yellow precipitate, which possessed the characteristics of the coloring matter found in almost all the woody vegetables. On adding a solution of acetate of lead to the liquor, which was still deeply colored, a new and very abundant yellow precipitate was immediately formed, which was separated by means of the filter. The liquor, now nearly colorless, still contained, amongst other substances, the acetate of lead, which had been added in excess: a current of hydrosulphuric acid was used to separate the lead. The liquor was then filtrated and concentrated by evaporation, treated by magnesia, and again filtrated. The magnesian precipitate was digested in boiling alcohol. The alcoholic liquors yielded, on evaporation, a pulverulent substance, which was extremely acrid, and possessed all the properties of the alkalies. This substance was at first yellowish; but, by solutions in alcohol, and subsequent precipitations, caused by pouring water into the alcoholic solutions, it was obtained in the form of a very white and perfectly inodorous powder.

M. Meissner, who discovered the veratrine nearly at the same time as MM. Pelletier and Caventou, recommends the seeds of the sabadilla to be treated with absolute alcohol, the alcoholic infusion evaporated, the residuum treated with water, the liquor filtered, and the veratrine to be precipitated by the carbonate of potass: it then only remains to wash the precipitate with water.

Comp. 34 eq. carbon=208.08+22 eq. hydrogen=22+1 eq. nitrogen=14.5+6 eq. oxygen=48, equiv.=292.23.

Prop. An acrid, whitish, inodorous powder, having an alkaline reaction.

Oper. A powerful topical excitant.

Use. Externally applied as an ointment in neuralgia and in gouty and rheumatic paralysis.

Dose. Not more than one-twelfth of a grain.

VERĀTRUM ALBUM. U. S.—L. E. D. White Hellebore Root. (*Polygam. Monœcia.* N. O. *Melanthaceæ.* North of Europe. ♃.)

Comp. Veratria; fecula; wax.

Prop. Inodorous; taste bitterish, acrid, nauseous: the powder is of a greyish-brown color.

Oper. Violently emetic; purgative, even when applied externally to an issue; errhine; externally stimulant.

Use. It is never given internally, unless in maniacal cases, in which it is not more useful than other strong purges; and even its use to promote a discharge from the nose in apoplexy and lethargy requires great caution. For its external use, see *Decoction* and *Ointment.*

Dose. As an errhine, gr. iij. or gr. iv. snuffed at bed-time.

Off. Prep. *Decoctum Veratri,* L. *Tinctura Veratri,* E. *Unguentum Veratri,* L.

VERATRUM VIRIDE. U. S. American Hellebore. Th Root. *Indigenous.*

Comp. Contains *Veratria.*

Prop. Has a bitter, acrid taste, and bears a strong resemblance in appearance and properties to the foregoing.

Oper. The same as Veratrum Album.

VERBASCUM THAPSUS. Folia, D. Leaves of Great Mullein. (*Pentandria, Monogynia.*)

Prop. Taste bitterish and sweet, odor sweetish.

Oper. Discutient, emollient, subnarcotic.

Use. Chiefly as a fomentation.

VINUM XERICUM. L. Vinum Album, E. Vinum Album Hispanum, D. Spanish White Wine, or Sherry.

Comp. All wines contain nearly the same components; and one wine differs from another only in the relative quantities of them which it contains. These are alcohol; water; extractive matter, which precipitates with the tartar in old wines; bitartrate of potassa; malic and tartaric acids; a volatile oil, on which the flavor depends, and coloring matter, derived from the husk. Most of the wines in our market are fictitious.

Prop. The odor of sherry is pleasant and aromatic, taste slightly acidulous and warm, with the agreeable bitter of the peach kernel. The taste of port is austere and strong; claret is less austere, thinner, and higher flavored. Of the white wines, Madeira is the strongest, Malaga the sweetest, and Hock the most acid, but the less fermentable; while Champagne contains a large quantity of loosely combined carbonic acid gas.

Oper. When good, and of a proper age, wine, in small quantities, is tonic, antispasmodic, and nutritive; when new, flatulent and purgative, sooner intoxicating, and instead of strengthening, produces debility.

Use. In the low and sinking stage of typhus fever the judicious exhibition of it fills the pulse, and restores its firmness, without increasing delirium; but it is hurtful if given when the skin is very hot and dry. It is useful also in tetanus, chorea, and some other convulsive affections; and in most cases in which tonics are indicated. In the convalescences from all severe diseases it is a remedy on which much dependence used to be placed; much less used at present. Hock is the best wine for dyspeptics.

Dose. f℥ ij. to Oiij. in twenty four hours, according to the nature of the disease, and the previous habits of the patient.

Off. Prep. *Vini Medicati,* L. E D.

VINUM ALOES. U. S.—L. E. D. Wine of Aloes. (*Aloes in pulv. tritæ* ℥ ij., *Canellæ cont.* ℥ iv., *Vini Xerici* Oij. Macerate fourteen days, shake often, and strain.)

Oper. Purgative, stomachic, according to the dose.

Use. In cold, phlegmatic habits, in paralysis, and gout to clear the bowels; in dyspepsia, and chlorosis.

Dose. f℥j. to f℥ij. to produce purging; fʒj. to fʒij. as a stomachic.

VĪNUM ANTIMŌNII POTASSIO-TARTRATIS. L. Wine of Potassio-Tartrate of Antimony. (*Antimonii Potassio-Tartratis* ℈ij., *Vini Xerici* Oj.)

VĪNUM ANTIMŌNĬALE. E. *Vinum Antimonii*, U. S. Liquor Tartari Emetici, D. Solution of Tartarized Antimony (*Antimonii Tart.* ℈ij., *Vini Xerici* Oj. Dissolve the tartarized antimony in the wine.) f℥j. contains gr. ij. of tartarized antimony.

Oper. Emetic in large doses; diaphoretic.

Use. To produce vomiting in children; in febrile and inflammatory diseases after purging, to produce sweat without heating, contra-indicated in low fevers.

Dose. fʒj. to f℥j., or a teaspoonful every five minutes, produce full vomiting; ♏xv. to fʒij. every two or three hours, in any proper vehicle, excite diaphoresis.

Incomp. Preparations of cinchona, and bitter astringent vegetables, &c. Vide *Antimonii Potassio-Tartras.*

VĪNUM CINCHONIÆ. F. Wine of Cinchonia. (Take of Cinchonia gr. xiv., Madeira Wine f℥xxxj.)

Use. In intermittents.

Dose. From fʒij. to f℥ij.

VĪNUM COLCHĬCI. U. S.—L. E Wine of Colchicum. (℞ *Colchici cormi* ℥viij., *Vini Xerici* Oij. Macerate for fourteen days, and strain)

Comp. Gallate of colchicia and wine.

Oper. Diuretic; sedative; purgative.

Use. In gout, rheumatism, and all inflammatory affections.

Dose. From ♏xxx. to fʒj. in any mild fluid.

VĪNUM GENTIĀNÆ. E. Compound Wine of Gentian. (*Rad. Gentianæ Luteæ* ℥ss., *Cort. Cinchonæ* ℥j., *Cort. Siccatæ flavæ Aurantii* ʒij., —— *Canellæ pulv.* ʒj., *Alcoholis Diluti* ℥ivss., *Vini Albi Hispani* Oj. f℥xvj.)

Oper. Tonic, stomachic.

Use. In dyspepsia, and debilities of the stomach.

Dose. fʒij. to fʒxvj. twice or thrice a day.

VĪNUM IPECACUANHÆ. U. S.—L. E. D. Wine of Ipecacuanha. (*Ipecacuanhæ concisæ* ℥ijss., *Vini Xerici* Oij.)

Oper. Emetic, diaphoretic.

Use. A good emetic for infants, as it operates more mildly than the antimonial wine: in coughs, diarrhœa, and dysentery; and hæmorrhages.

Dose. For the former intention fʒiv. to fʒx. in divided doses, for the latter, ♏x. to ♏xxx. in some proper vehicle, every two or three hours.

VĪNUM NICOTĬANÆ TABĂCI. U. S.—E. Wine of Tobacco. (*Foliorum Nicotianæ Tabaci* ℥j., *Vini Albi Hispani* ℔j.)

Oper. Narcotic, diuretic, antispasmodic.

Use. In dropsical cases, colica pictonum, and ileus.

Dose. ♏x. to ♏xxxvj. twice a day.

VĪNUM OPII. U S.—L. E. D. Wine of Opium. (*Extracti*

Opii ℥ ijss., *Cinnam. Cort. cont.*, *Caryophylli cont.*, *sing.* ʒ ijss., *Vini Xerici* Oij.)

Oper. Narcotic, anodyne.

Use. In the same cases in which tincture of opium is used; but it occasions less disturbance of the brain and nervous system; and is therefore better suited for very young patients, nervous habits, and where the head is much affected.

Dose. ♏x. to f ʒ j.

VĪNUM QUINÆ. F. Wine of Quina. (Take of Sulphate of Quina gr. ix., Madeira Wine ℔ ij.)

Dose. From f ʒ iv. to f ℥ iv.

VĪNUM RHEI. U. S.—E. Rhubarb Wine. ((*Rad. Rhei concisæ* ℥ ij., *Canellæ pulv.* ʒ j., *Alcoholis Diluti* ℥ ijss., *Vini Albi Hispani* ℥ xvjss.)

Oper. Laxative, stimulant.

Use. In weakness of the stomach and bowels; and in diarrhœa from viscid mucus.

Dose. f ʒ iv. to f ℥ ss.

VĪNUM TABĀCI. U. S.—E. Wine of Tobacco. (*Tobacco* ℥ j., *Sherry* f ℥ xij.)

Oper. Sedative

VĪNUM VERĀTRI ALBI. U. S.—L Wine of Hellebore. (*Veratri con.* ℥ viij., *Vini Xerici* Oij. Macerate for fourteen days, and strain.)

Use. In cutaneous affections; and in gout, combined with opium.

Dose. f ʒ ss. to f ʒ ij.

VIOLA. U. S.—E. (Viola *odorata.*) The flowers of the violet, used as a coloring matter for a syrup: a test of acids.

Comp. The viola odorata, and probably other species, contains a peculiar alkaline principle (*Violia*), bearing some resemblance to *Emetia*, but possessing distinct properties. It is very active and poisonous (Orfila); white; soluble in alcohol, scarcely soluble in water, and forms salts with acids. Combined in the plant with malic acid, obtained by treating with distilled water the alcoholic extract of the dried root, decomposing by means of magnesia the malate of violia contained in the solution, and extracting the alkali from the precipitated matters by alcohol, which yields it by evaporation.

VIŎLÆ ODORATÆ FLORES. E. D. Flowers of the Sweet Violet. (*Pentand. Monogyn.* N. O. *Violaceæ.* Europe. ♃.)

Prop. Odor pleasant, peculiar; have scarcely any taste; impart their color to water.

Oper. Slightly laxative; emetic, expectorant, mucilaginous, emollient.

Use. In syrup, united with castor oil or olive oil, to clear the bowels of infants when the meconium is retained. The viola *pedata* is often prescribed for nephritic affections, particularly gravel. Dr. James considers it as a highly useful remedy in such cases; also in pectoral and cutaneous diseases. The infusion is a delicate test of uncombined acids and alkalies.

Dose. f ʒ j. to f ʒ ij. for infants.

Off. Prep. *Syrupus Violæ*, E. D.

WINTERA AROMATICA. U. S. (*Secondary.*) *Cortex*, E. Drymys Aromatica, *Cortex*, D. Winter's Bark. (*Polyandria Tetragyn.* N. O. *Winteraceæ.* Magellan. ♄.)

Prop. Odor aromatic; taste warm, acrid, aromatic

Oper. Carminative, tonic.

Use. As an adjunct to stomachic infusions, in dyspepsia, and scorbutus.

XANTHORHIZA. U. S. (*Secondary.*) Yellow Root. Xan *Apiifolia.* (*Pentandria, Polygynia.* N. O. *Ranunculaceæ Indigenous.*) The Root.

Comp. Resin, gum.

Prop. Root from three inches to a foot in length, half an inch thick, of a yellow color, and very bitter taste. Imparts its taste and color to water.

Oper. Tonic.

Use. In all cases where a pure tonic is indicated. Its properties are analogous to those of Columbo and Quassia.

XANTHOXYLUM. U. S. (*Secondary.*) Prickly Ash. Xan. *Fraxineum.* The Bark. *Indigenous.* ♀. (*Diœcia, Pentand.* N. O. *Terebinthaceæ.*)

Comp. Woody fibre, volatile oil, fixed oil, resin, gum, coloring matter, and a peculiar principle, *Xanthoxylin.*

Prop. Taste bitterish, and afterwards extremely acrid. Inodorous.

Oper. Stimulant, diaphoretic, resembling mezereon and guaiac.

Use. In chronic rheumatism, and as a topical remedy for toothache.

Dose. Of the powder, from gr. x. to ʒ ss.; of the infusion, from f℥ j. to f℥ iij., three or four times in twenty-four hours; or of the decoction, made by boiling ℥ j. of the bark in Oij. of water for fifteen minutes: f℥ iv. to ℥ viij. every three or four hours.

ZINCUM. U. S.—L. E. D. Zinc. (A metal obtained from calamine and blende; its ores are found in England and other parts.)

Prop. Color bluish white; lustre of a fresh surface considerable, but it is soon dulled by the facility of its oxidation; hard; texture striated; spec. grav. 7.190; melts at 700° of Fahr.; burns with a bright flame in a higher temperature, and is volatilized in the form of a white flocculent oxide.

Use. In pharmacy, to form the following preparations:

ZINCI OXYDUM. U. S.—L. E. D. Oxide of Zinc. (*Zinci Sulphatis* ℔j., *Ammoniæ Sesquicarbonatis* ℥ vj ss., *Aquæ Distillatæ cong.* iij. Dissolve separately the sulphate and the sesquicarbonate in Oxij. of distilled water, and strain; afterwards mix. Wash the precipitate frequently with water, and lastly, calcine it with a strong heat for two hours.

Comp. Zinc 80, oxygen 20 parts, in 100 of oxide.—*Prout.* Or 1 eq. of zinc=32.3+1 of oxygen=8, equiv.=40.3.

Prop. Inodorous; insipid; of a snow-white color; insoluble in alcohol or water; entirely soluble in acids; in the pure alkalies

Oper. Tonic, antispasmodic, externally detergent, exsiccative.

Use. In epilepsy, chorea, and other spasmodic affections. For its external use, see *Ung. Zinci.*

Dose. Gr. j. to gr. vj. twice a day.

Off. Prep. *Unguentum Zinci,* L. E. D.

ZINCI SULPHAS. U. S.—L. E. D. Sulphate of Zinc. (*Zinci in frustula* ℥ v., *Acidi Sulphurici Diluti* Oij.) A plate of zinc put into the solution purifies it from any iron, copper, or lead it may contain. *Zincum Vitriolatum.*

Comp. Oxide of zinc 20, acid 40, water of crystallization 40 parts to 100 of the sulphate: or 1 eq. of protoxide of zinc=40.3+1 eq. of acid=40.1+7 water=63, equiv.=143.4.

Prop. Inodorous; taste styptic; in white, semi-transparent, efflorescent crystals, which are right rhombic prisms; soluble in three parts of water at 60°; in less than its own weight of boiling water; insoluble in alcohol.

Oper. Emetic, tonic, antispasmodic, externally astringent.

Use. As it operates very quickly, it is used, combined with infusion of ipecacuanha, to empty the stomach in the commencement of the cold stage of the intermittent paroxysm; and in other cases where immediate vomiting is required. As a tonic it is useful in phthisis, dyspepsia, and nervous affections. Externally in collyria, in ophthalmia, after the inflammatory action has subsided; in injections, in gonorrhœa; and as a lotion in external inflammations, and to stop inordinate discharges.

Dose. Gr. x. to ʒss. to produce vomiting; as a tonic, gr. j. to gr. ij. twice or thrice a day.

Incomp. Alkalies, earths, sesquicarb. ammoniæ, hydro-sulphurets, lime-water, astringent vegetable infusions, milk.

Off. Prep. *Solutio Sulphatis Zinci*, E. *Solutio Acetatis Zinci*, E. *Liquor Aluminis Comp.*, L. *Zinci Oxydum*, L. E. D.

ZINGIBER. U. S.—L. E. Amomum Zingiber, Radix, D. Ginger Root. (Zingiber *Officinale*. *Roscoe. Trans. Linn. Soc. Monand. Monogyn.* N. O. *Zingiberaceæ.* East Indies. 4.)

Prop. Odor aromatic; taste warm, aromatic, acrid; in wrinkled, greyish-white pieces, giving a pale yellowish feculent powder when pulverized; yields its virtues to alcohol, and in a great degree to water.

Oper. Carminative, stimulant, sialagogue.

Use. In gout, flatulent colic, dyspepsia, and tympanitis; as an adjunct to griping purgatives; less heating than pepper.

Dose. Gr. x. to ℈j.; an overdose is apt to induce spasmodic stricture.

Off. Prep. *Syrupus Zingiberis*, L. E. D. *Tinct. Zingiberis*, L. E. D.

ZINGIBER; RADIX CONDITA. D. —— Radix Condita ex India Aliata, E. Preserved Ginger Root.

A condiment possessing all the virtues of ginger; and therefore a useful addition to cold summer fruits and vegetables, when eaten by those of gouty and dyspeptic habits.

APPENDIX.

NO. I.

OF POISONS.

CHAPTER I.

CLASSIFICATION OF POISONS.

POISONS may be divided into three classes, according to their mode of action on the system; namely, *Irritants*, *Narcotics*, and *Narcotico-Irritants*. This classification is a modification of that originally proposed by Orfila; and is almost universally adopted by toxicologists.

The *Irritants* are possessed of these common characters. When taken in ordinary doses, they occasion speedily violent vomiting and purging. These symptoms are either accompanied or followed by intense pain in the abdomen. The peculiar effects of the poison are manifested chiefly on the stomach and intestines, which, as their name implies, they irritate and inflame. Many substances belonging to this class of poisons, possess corrosive properties, such as the strong mineral acids, caustic alkalies, corrosive sublimate, and others. These, in the act of swallowing, are commonly accompanied by an acrid or burning taste, extending from the mouth down the œsophagus to the stomach. Some irritants do not possess any corrosive action,—of which we have examples in arsenic, the poisonous salts of barytes, carbonate of lead, cantharides, &c., and these are often called pure irritants. They exert no chemical action on the tissues with which they come in contact; they simply irritate and inflame them.

There is this difference between *Corrosive* and *Irritant* poisons. Under the action of corrosive poisons, the symptoms are commonly manifested immediately, because mere contact produces disorganization of a part, usually indicated by some well-marked symptoms. In the action of the purely irritant poisons, the symptoms are generally more slowly manifested, seldom showing themselves until at least half an hour has elapsed from the time of swallowing the substance. Of course, there are exceptions to this remark; for sometimes irritants act speedily, though seldom with the rapidity of corrosive poisons. It is important, in a practical view, to distinguish whether, in an unknown case, the poison which a person requiring immediate treatment may have swallowed be irritant or corrosive. This may be commonly determined by the answer to the question, as to the time at which the symptoms appeared after the suspected poison was taken. In this way we may often easily distinguish between a case of poisoning from arsenic and one from corrosive sublimate. There is also another point which may be noticed. As the corrosion is due to a decided chemical action, so an examination of the mouth and fauces may enable us to determine the nature of the poison swallowed.

It has been already stated that there are many irritant poisons which have no corrosive properties; and therefore never act as corrosives: but it must be remembered that every corrosive may act as an irritant. Thus the action of corrosive sublimate is that of an irritant poison, as, while it destroys some parts of the coats of the stomach and intestines, it irritates and inflames others. So again most corrosive poisons may lose their corrosive properties by dilution with water, and then they act simply as irritants. This is the case with the mineral acids.

In some instances, it is not easy to say whether an irritant poison possesses or not corrosive properties. Thus oxalic acid acts immediately, and blanches the mucous membrane of the mouth and fauces, but we have never met with any decided marks of corrosion produced by it in the stomach or viscera.

Irritant poisons, for the most part, belong to the mineral kingdom; and they may be divided into the non-metallic and metallic irritants. There are a few derived from the animal and vegetable kingdoms; but these are not very often employed criminally. Some of the gases likewise belong to the class of irritant poisons.

Narcotic poisons have their operation confined to the brain and spinal marrow. Either immediately or some time after the poison has been swallowed, the patient suffers from cephalalgia, vertigo, paralysis, coma, and in some instances tetanus. They have no acrid burning taste like the irritants; and they very rarely give rise to vomiting or diarrhœa. When these symptoms follow the ingestion of the poison into the stomach, the effect may be ascribed either to the quantity in which the poison has been taken, and the mechanical distension of the stomach thereby produced, or to the poison being combined with some irritating substance, such as alcohol. The pure narcotics are not found to irritate or inflame the viscera.

Notwithstanding the well-defined boundary thus apparently existing between these two classes of poisons, it must not be supposed that each class of bodies will always act in the manner indicated. Some irritants have been observed to affect the brain or the spinal marrow remotely. This is the case with oxalic acid and arsenic. Both of these common poisons have in some instances given rise to symptoms closely resembling those of narcotic poisoning; namely, coma, paralysis, and tetanic convulsions. Thus, then, we must not allow ourselves to be deceived with the idea that the symptoms are always clearly indicative of the kind of poison taken.

The narcotic poisons are few in number, and belong to the vegetable kingdom. Some of the poisonous gases possess a narcotic action.

Narcotico-Irritants.—Poisons belonging to this class have, as the name implies, a compound action. They are all derived from the vegetable kingdom. At variable periods after being swallowed, they give rise to vomiting and diarrhœa, like irritants and sooner or later produce stupor, coma, paralysis, and convulsions, owing to their effect on the brain and spinal marrow They possess the property, like irritants, of irritating and inflaming the alimentary canal. As familiar examples, we may point to nux vomica, monkshood, and poisonous mushrooms. This class of poisons is very numerous, embracing a large variety of well-known vegetable substances; but they rarely form a subject of difficulty to a medical practitioner. The fact of the symptoms occurring after a meal at which some suspicious vegetables may have been eaten, coupled with the nature of the symptoms themselves, will commonly indicate the class to which the poison belongs. Some narcotico-irritants have a hot acrid taste, such as the aconite or monkshood.

We here subjoin tables of the more important poisons, with the properties of which it is necessary for a medical jurist to be acquainted. Poisons are divided into three classes 1. Irritants. 2. Narcotics. 3. Narcotico-Irritants. The class of Irritants may be thus subdivided :—

- 1. IRRITANTS.
  - MINERAL.
    - NON-METALLIC.
    - METALLIC.
  - VEGETABLE.
  - ANIMAL.

CLASS I.

1. *Non-Metallic Irritant Poisons.*

Sulphuric acid. Sulphate of Indigo. Nitric acid. Muriatic acid. Nitromuriatic acid. Nitrosulphuric acid. Oxalic acid.* Binoxalate of potash. Potash and its carbonates. Soda and its carbonates. Ammonia and its carbonate. Iodide of potassium. Sulphurets of potassium and sodium. Nitrate of potash. Bitartrate of potash. Sulphate of potash. Alum. Barytes and its salts.

2. *Metallic Irritant Poisons.*

Arsenic. Arsenite of potash. Arsenic acid. Orpiment. Corrosive sublimate. Calomel. White precipitate. Red oxide of mercury. Turbith mineral. Vermilion. Cyanide of mercury. Nitrates of mercury. Lead and its salts. Copper and its salts. Tartarized antimony. Butter of antimony. Chlorides of tin. Salts of zinc. Nitrate of silver. Sulphate of iron. Muriate of iron. Subnitrate of bismuth. Bichromate of potash.

3. *Vegetable Irritant Poisons.*

Aloes. Colocynth. Gamboge. Jalap. Scammony. Savin. Croton oil. Castor-oil seeds. Berries of the yew. Cayenne pepper. Oil of tar.

4. *Animal Irritant Poisons*

Cantharides. Poisonous articles of food.

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* Oxalic acid and the binoxalate of potash, which really belong to the vegetable kingdom, are placed among the non-metallic mineral irritants from the analogy which they bear to these poisons in their effects.

CLASS II.

Narcotic Poisons.

Hyoscyamus. Lactuca. Solanum. Opium, and its preparations. Morphia, and its salts. Hydrocyanic acid. Oil of bitter almonds. Laurel water. Cyanide of potassium.

CLASS III.

Narcotico-Irritant Poisons.

Nux vomica. Strychnia. Colchicum. Veratria White hellebore. Digitalis. Conium. Cicuta. Æthusa cynapium. Œnanthe crocata. Datura stramonium. Aconitum napellus. Atropa belladonna. Nicotiana tabacum. Cocculus indicus. Fungi. Camphor. Alcohol.

The selection here made has been chiefly confined to those bodies which have either caused death or given rise to alarming accidents.

CHAPTER II.

RULES TO BE OBSERVED IN INVESTIGATING A CASE OF POISONING.

When a practitioner is called to a case of poisoning, it is above all things necessary that he should know to what points he ought to give his attention. It is very proper that every effort should be made by him to save life where the individual is still living; but while engaged in one duty, it is also in his power to perform another, supposing the case to be one of suspected criminal poisoning, namely, to note down many circumstances which may tend to detect the perpetrator of the crime. There is no person so well fitted to observe these points as a medical man; but it unfortunately happens, that many facts important as evidence, are often overlooked. The necessity for observing and recording them, is not perhaps generally known.

The following are the principal points which demand the attention of a medical jurist in all cases of suspected poisoning:—

1. With respect to

Symptoms.

1. The time of their occurrence,—their nature.

2. The exact period at which they were observed to take place after a meal, or after food or medicine had been taken.

3. The order of their occurrence.

4 Whether there was any remission or intermission in their progress, or, whether they continued becoming more and more aggravated until death.

5. Whether the patient had labored under any previous illness.

6. Whether the symptoms were observed to recur more violently after a particular meal, or after taking any particular kind of food or medicine.

7. Whether the patient has vomited:—the vomited matters, if any (especially those first ejected), to be procured; their color noted, as well as their quantity.

8. If none be procurable, and the vomiting has taken place on the dress furniture, or floor of the room,—then a portion of the

clothing, sheet, or carpet, may be cut out and reserved for analysis:—if the vomiting have occurred on a deal floor, a portion of the wood may be scraped or cut out:—or if on a stone pavement, then a clean piece of rag or sponge soaked in distilled water may be used to remove any traces of the poison.

9. Endeavor to ascertain the probable nature of the food or medicine last taken.

10. Ascertain the nature of *all* the different articles of food used at a mea'.

11. Any suspected articles of food, as well as the vomited matters, to be sealed up in a proper vessel, and reserved for analysis.

12. Note down in their own words, all explanations voluntarily made by parties present, or who are supposed to be concerned in the suspected poisoning.

13. Whether more than one person partook of the food or medicine: if so, whether all these persons were affected, and how.

14. Whether the same kind of food or medicine had been taken before by the patient or other persons, without ill effects following.

In the event of the death of the patient, it will be necessary for a practitioner to note down—

15. The *exact time* of death, and thus determine how long a period the person has survived after having been first attacked with the symptoms.

16. Observe the attitude and position of the body.

17. Observe the state of the dress.

18. Observe all surrounding objects. Any bottles, paper packets, weapons, or spilled liquids lying about, should be collected and preserved.

19. Collect any vomited matters near the deceased. Observe whether vomiting has taken place in the recumbent position or not. If the person have vomited in the erect or sitting posture, the front of the dress will commonly be found covered with the vomited matters.

In the event of a post mortem examination being ordered by a coroner—

20. Note the external appearance of the body, whether the surface be livid or pallid.

21. Note the state of countenance.

22. Note all marks of violence on the person or discomposure of the dress,—marks of blood, &c.

23. Observe the presence or absence of warmth or coldness in the legs, arms, abdomen, mouth, or axillæ.

24. The presence of rigidity or cadaverous spasm in the body.

To give any value to the two last-mentioned characters, it is necessary for the practitioner to observe the nature of the floor on which the body is lying, whether it be clothed or naked, young or old, fat or emaciated. All these conditions create a difference, in respect to the cooling of the body and the access of rigidity.

25. If found dead, when was the deceased last seen living or known to have been alive!

26. Note all circumstances leading to a suspicion of suicide or murder.

Inspection of the Body.

27. Observe the state of the abdominal viscera.

28. If the stomach and intestines be found inflamed, the seat of inflammation should be exactly specified; also all marks of ulceration, effusion of blood, corrosion, or perforation.

29. The contents of the stomach should be collected in a clean vessel; their color, odor, and nature specified.

30. The contents of the duodenum should be separately collected.

31. Observe the state of the large intestines, especially the rectum.

32. The state of the larynx, fauces, and œsophagus, whether there be in these parts any marks of inflammation or corrosion.

33. The state of the thoracic viscera;—all morbid changes noted.

34. The state of the brain.

Such are the points to which, in the greater number of cases of suspected poisoning, a medical jurist should attend. By means of these data, noted according to the particular case to which they are adapted, he will in general be enabled, without difficulty, to determine the probable time of death, the probable cause of death, and the actual means by which death was brought about. He may thereby have it in his power also to point out the dish that may have contained the poison, if the case be one of poisoning; and to throw some light upon any disputed question of suicide or murder in relation to the deceased. Many cases of poisoning are obscure, owing to these points not having been attended to in the first instance.

CHAPTER III.

TESTS AND APPARATUS REQUIRED FOR THE ANALYSIS OF POISONS.

Acids.—Sulphuric, Nitric, Muriatic, Oxalic, Tartaric, Acetic.

Alkalies.—Potash, Soda, Ammonia, and their Carbonates. Calcined Carbonate of Soda. Lime.

Salts.—Nitrate of Barytes. Chloride of Barium. These may be made by digesting the pure carbonate in the respective acids, and evaporating to crystallization.

Chloride of Lime. Sulphate of Lime. Nitrate of Silver. Sulphate of Iron. Ferrocyanate of Potash. Phosphate of Soda Sulphate of Copper. Iodide of Potassium. Acetate of Lead. Bichloride of Mercury. Peroxide of Manganese. Carbonate of Barytes.

Oxalate of Ammonia.—Prepared by neutralizing a strong solution of Oxalic acid, with Sesquicarbonate of Ammonia, and evaporating at a low temperature to crystallization. Should the salt become acid by evaporation, add a little ammonia.

Hydrosulphuret of Ammonia.—Pass sulphuretted hydrogen gas by means of a bent tube, into equal parts of a solution of pure ammonia and water, until the liquid is saturated with the gas. The solution must be preserved in a green-glass bottle. This is an important test for the detection of metallic poisons. When well made, it ought to give no precipitate with sulphate of magnesia.

Sulphuretted Hydrogen.—This should always be employed in the state of gas, and not dissolved in water. It may be prepared by gently heating in a retort or a flask with a bent tube, sulphuret of iron with five or six parts of diluted sulphuric acid. Care must be taken not to distil over the contents of the retort. This gas precipitates most metallic poisons; some completely, others partially. The suspected solution into which it is passed, should neither be too acid nor too alkaline.

Sulphuret of Iron.—Heat a bar of iron to whiteness, and rub on its surface, a stick of sulphur. Collect the sulphuret which falls in a state of fusion. in a vessel of cold water, placed beneath. Dry it and keep it closely bottled. This preparation serves for the purpose of making sulphuretted hydrogen gas.

Sulphate of Strontia.—This salt in solution, is sometimes used as a test for the salts of Barytes. It may be made by digesting pure carbonate of strontia in dilute sulphuric acid. It is not very soluble in water, in consequence of which, when employed as a test, it must be used in comparatively large quantity.

Protochloride of Tin.—Obtained by digesting pure tin in strong muriatic acid at a gentle heat, until no more is dissolved. A piece of metallic tin should be always kept in the solution. A useful test for Gold and Mercury.

Chloride (Ter) of Gold.—Dissolve gold foil at a gentle heat, in a mixture of one part nitric and two parts muriatic acid. The solution may afterwards be diluted with its bulk of distilled water. Used to distinguish meconic from sulphocyanic acid.

Bichloride of Platina.—Dissolve slips of fine platina foil or platina filings, in a mixture of one part nitric and two parts muriatic acid, brought to a boiling temperature. Platina must be added, until no further action ensues. This is a useful test for potash.

Iodic Acid.—Digest Iodine in the strongest Nitric Acid (sp. gr. 1.52), in a retort over a sand bath, and repeatedly wash down with the acid, the iodine that may sublime. This process requires many hours for its completion. When there is no further action pour off the liquid, and evaporate to dryness. Iodic acid is left as a colorless solid. This test serves to distinguish morphia from the other alkaloids, and also to detect sulphuric acid in articles of clothing.

Permuriate (Sesquichloride) of Iron.—Dissolve red (per) oxide of iron in muriatic acid. It may be neutralized for the purpose of a test by the addition of a small quantity of potash. Used as a test for morphia and its salts.

Black Flux.—Prepared by mixing thoroughly two parts of bitartrate of potash with one part of nitrate of potash, and projecting the mixture by small portions into a red-hot crucible, until complete deflagration has taken place. The grey mass obtained, should be pulverized, and kept from air in a well-closed bottle. This substance is used for the reduction of the compounds of arsenic. The bitartrate itself calcined, or well dried oxalate of lime, will answer the same purpose.

Soda Flux.—Calcine in an earthen retort crystallized acetate of soda reduced to a fine powder. The charred mass may be afterwards pulverized. It does not deliquesce like the black flux, and is a good reducing agent.

Test Papers.—*Litmus* paper for acids.—This may be made by saturating unsized paper (free from lime, in a strong infusion of litmus (about one ounce to half a pint of boiling water), and drying it in a place entirely free from acid vapors. It should be kept from air and light. *Rose* paper for alkalies. This is made by saturating unsized paper in a strong infusion of red roses (about two ounces of petals to a pint of water), and drying the paper quickly. It should be kept from air and light.

Miscellaneous Articles.—Copper filings.—Thin copper-foil.—Copper-wire.—Tin filings.—Tin-foil.—Zinc-foil, very thin.—Gold-leaf. Gold-foil, such as is used by dentists: in this state it serves for the detection of mercurial poisons. Reduced silver. Platina-foil—Platina wire. Platina crucible and cover.—Platina cup: these two vessels may have a capacity of about two fluid-drachms. Small glass tube (about two pounds), varying from one-fourth to one-eighth of an inch in the bore. This tube, which serves for the making up of small reduction tubes, and numerous other purposes, should be very thin. Watch glasses. Test-tubes (thin) —Glass plate. Florence flasks.—Large and small retort and receiver. Filtering paper. Spirit lamp.

Charcoal powder. Animal charcoal. Alcohol. Litmus cake. Sulphate of indigo.

In pursuing an analysis, the following precautions ought to be observed: 1. All the apparatus should be perfectly clean; when metals are to be reduced, the glass tubes and fluxes should be warm and dry. 2. The solutions of the tests should be concentrated. This will give a known and definite strength, which will regulate the quantity to be employed. 3. Before employing the tests, they should be tried for the ordinary impurities which they are liable to contain.

Poisons are substances of an animal, a vegetable, or a mineral nature, which produce effects deleterious to the animal economy when they are taken into the stomach in certain doses; and, in some instances, even when they are applied to the surface of the body. Many poisonous substances, however, are daily employed as medicines; and with the best results, when they are administered in proper doses, and with due precaution.

Writers who professedly treat of poisons, have arranged the substances which they regard as such, according to their effects on the animal economy; but as the following memoranda are intended merely as references from which the practitioner may refresh his memory when his assistance is suddenly required in cases of poisoning, the author conceives the alphabetical arrangement will be the most useful, and has consequently adopted it. A similar reason has also induced him to place the English name as the title of each article.*

ACETIC ACID. (*Strong.*)
Symptoms. Great heat, and a sensation of burning pain in the stomach; convulsions; death.

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* Many poisonous substances are purposely not noticed, because they are not likely to be employed as such; and, consequently they do not demand general attention.

Morbid Appearances. The mouth and fauces brownish,—excoriated, and the lingual papillæ enlarged. The œsophagus also lined with a brown adventitious membrane. The stomach of a livid hue towards the pylorus and black at the fundus. The vessels large and much injected.

Antidotes. Magnesia; soap in water; after which the stomach should be emptied by the stomach-pump or an emetic.

ACETATE OF LEAD; see under *Carbonate of Lead.*

ACONITUM; see *Monkshood.*

AGARIC; see *Fungi.*

ALCOHOL. *Local Effects,*—those of a powerful irritant and caustic poison to whatever part of the body it is applied; it causes contraction and condensation of the tissue, giving rise to pain, heat, redness, and other symptoms of inflammation As alcohol has a strong affinity for water, it absorbs it from the soft, living parts with which it comes in contact, and where these are albuminous or fibrinous, it increases their density and firmness. Irritation and inflammation are thus set up by the reaction of the vital powers, brought about by the chemical action of the alcohol.

The *General Symptoms* are those produced by narcotics.

Morbid Appearances—are inflammation, redness, softening, &c., of the mucous membrane of the stomach and bowels; with congestion of the cerebral vessels, with or without extravasation of blood and serum.

Treatment. First evacuate the contents of the stomach by the stomach-pump. Dash cold water on the head in a constant stream; warmth to the feet; and as soon as the patient can swallow, give acetate of ammonia or spirits of ammonia. Cupping may be necessary to the temples; and in some cases artificial respiration must be kept up for some time. Mustard to the epigastrium is a good remedy.

AMMONIA; (*Liquor Ammoniæ.*) A corrosive mineral poison.

Symptoms. Excoriations of the mouth and fauces; sensation of burning in the throat, chest, and stomach; followed by vomiting and purging, the ejected matter being mixed with blood. When the dose is large, the immediate feeling is that of strangulation, attended with convulsions and high delirium. If the result be fatal, it very quickly follows the administration of the poison. The inhalation of the ammonia by applying the solution to the nostrils is equally hazardous, and causes the same symptoms as when it is taken into the stomach.

Morbid Appearances. Marks of strong inflammatory action in the œsophagus and cardiac portion of the stomach; and in the bronchial tubes when the poison has been inhaled.

Tests. The three caustic alkalies, potash, soda, and ammonia, are known from the solutions of the alkaline earths by the fact, that they are not precipitated by solution of carbonate of potash. They all three possess a powerful alkaline reaction on test paper, which, in the case of ammonia, is easily dissipated by heat. Ammonia is immediately known from potash and soda, by its odor and volatility. If the solution in water be very dilute, the odor may be scarcely perceptible. The alkali may then be discovered, provided we have first assured ourselves, by evaporating a portion of the liquid, that potash and soda are absent,—by adding to the solution a mixture of arsenious acid and nitrate of silver. The well-known yellow precipitate of arsenite of silver will be instantly produced. In addition to these characters, ammonia re-dissolves the brown oxide of silver, which it precipitates from the nitrate, while potash and soda do not The sesquicarbonate of ammonia may be known from other salts by its alkaline reaction, its odor, and its entire volatility as a solid, from pure ammonia:—1, by its effervescing on being added to an acid; 2, by its yielding an abundant white precipitate with a solution of muriate of lime;—from the carbonates of potash and soda, among other properties, 1, by its giving no precipitate with a solution of the sulphate of magnesia; 2, from the rich violet blue solution, which it forms when added in excess to the sulphate of copper; 3, by its odor and volatility.

Caustic Potash and *Soda* are best known from their respective carbonates by giving a brown precipitate with a solution of nitrate of silver. The carbonates, on the other hand, yield a whitish-yellow precipitate. Caustic potash is known from caustic soda by the following characters:—1. Its solution is precipitated of a canary-yellow color, by bichloride of platina. 2. It is precipitated in granular white crystals, by the addition of an excess of a strong solution of tartaric acid. Caustic soda is not precipitated by either of these tests, which will serve equally to distinguish the salts of potash from those of soda. 3. If we neutralize the two alkalies by dilute nitric acid, and crystallize the liquid on a slip of glass, should the alkali be potash, the crystals will be in the form of long slender fluted prisms; if soda, of rhombic plates. 4. A fine platina wire may be dipped into the alkaline liquid, and then dried by holding it above the flame of a spirit-lamp. In this way, a thin film of solid alkali is obtained on the wire. On introducing this into the colorless part of the flame, if it be potash, the flame will acquire a lilac color; if soda, a rich yellow color. This test applies to the salts of the alkalies, but care must be taken that the platina wire is perfectly clean.

The carbonates of potash are known from those of soda by the above tests. The carbonate is known from the bicarbonate of either alkali, by the fact that the former yields immediately a white precipitate, with a solution of sulphate of magnesia, while the latter is unaffected by that test.

In liquids containing organic matter.—Such liquids will possess an alkaline reaction. If the alkali be ammonia, this will be announced by the odor, and it may then be obtained by distillation with or without the addition of a small quantity of sulphuric acid. If the alkali be in small proportion, this can afford no evidence of poisoning; since many animal fluids contain the alkali, and in those which do not contain it, it is easily generated either by spontaneous decomposition, or sometimes even by the heat required for distillation. Should the alkali be in large quantity, this is no evidence of poisoning by it, unless we at the same time discover obvious marks of its local action on the mouth, fauces, œsophagus, and stomach. If the organic liquid be highly alkaline, but give out no odor of ammonia, either by itself or on distilling a portion with sulphuric acid the alkali may be either potash or soda, or their
The latter would be known by the liquid effervescin

a portion to an acid. The organic liquid may be evaporated to dryness, then heated to char the animal and vegetable matter, and the alkali will be recovered from it in the state of carbonate by digesting the residuary ash in distilled water. It has been also recommended to neutralize by muriatic acid, to evaporate, incinerate, and procure the alkali for analysis in the state of chloride. Traces of these alkalies furnish no evidence, since all the animal liquids and membranes yield soda, and many of them potash. In no case will the discovery of the alkalies be any proof of poisoning, unless the marks of their action be apparent in the fauces and stomach.

Treatment. The immediate exhibition of vinegar, lemon juice, or solution of citric acid; and afterwards of milk, mucilages, and demulcent fluids; bleeding, if symptoms of intestinal inflammation supervene. When ammoniacal gas has been inhaled, the patient should immediately inspire the vapor of acetic acid or hydrochloric acid. If bronchial inflammation supervene, it is to be treated in the usual way.

AMMONIÆ HYDROCHLORAS. *Sal. Ammoniæ.*

Symptoms. Similar to those produced by ammonia.

Treatment. Warm water, and mucilaginous and demulcent liquids should be given, to promote vomiting. No chemical antidote is known. The gastro-enteritis which it excites, is to be combated by the usual means.

⁂ These instructions apply equally to cases of poisoning by *Sesquicarbonate of Ammonia* and by *Hartshorn.*

AMMONIATED COPPER. (*Cuprum Ammoniatum.*) A corrosive metallic poison.

Symptoms and *Morbid Appearances* nearly the same as those produced by the other salts of copper. (See *Verdigris.*)

Test. This poison is readily known by its beautiful blue color, and ammoniacal odor. When mixed in fluids which partially decompose it, as, for instance, coffee, port wine, or malt liquors, it may be detected by adding to the suspected fluid a few drops of a spirituous solution of guaiac. If the vehicle be coffee, and a salt of copper be present, it will instantly produce a beautiful deep greenish-blue precipitate. If the vehicle be port wine, it gives a greenish color to the wine, and the color evolved by the tincture of guaiac will be nearly an indigo blue, with a slight shade of green; and if beer, that of verditer. It changes solution of arsenious acid to green.

Treatment. The use of the stomach-pump, and oily clysters. Albumen in solution (in coffee, if it can be obtained*), should then be freely exhibited; and vomiting again excited by drinking large quantities of mucilaginous fluids, if the poison has been very recently taken; but if it have already passed into the bowels, give castor oil in coffee, combined with opiates and other narcotics; bleed both generally and locally; and employ warm baths and fomentations with emollient clysters.

AMMONIÆ HYDROSULPHAS. (*Hydrosulphate of Ammonia,* or *Hepatized Ammonia.*) This is evolved from decomposing animal matters, as in privies.

Symptoms. Nausea, vomiting, diminished frequency of pulse giddiness, extreme languor, drowsiness, and sleep; a powerful asphyxiating agent when inhaled, causing sudden weakness, insensibility, convulsions, delirium, and death.

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* Coffee instantly decomposes the salts of copper.

Treatment. Place the patient on his back in the open air, with his head elevated; apply cold affusion to the face and breast; produce artificial respiration of air, through which chlorine is diffused, by pressing down the ribs and forcing up the diaphragm, and then suddenly removing the pressure; strong frictions to the spine, chest, and extremities; injecting stimulants into the stomach, as a weak solution of chlorine, or brandy. When swallowed, dilute solutions of chlorine, or chloride of soda or lime, should be given, and the contents of the stomach removed by the stomach-pump.

ANTIMONIUM TARTARIZATUM; see *Potassio-Tartrate of Antimony.*

ARGENTI NITRAS; see *Nitrate of Silver.*

ARSENIC—ARSENIOUS ACID. A corrosive mineral poison

Symptoms. Metallic austere taste; constant spitting of saliva devoid of the mercurial fœtor; constriction of the pharynx and œsophagus; nausea and vomiting, sometimes of a brown mucous matter, which is occasionally mixed with blood; fainting, with excessive thirst; a sensation of great heat at the throat and the præcordia: heat and severe pain in the stomach, which is generally so irritable as to reject the mildest fluids; severe gripings, purging, and tenesmus, the stools being deep green or black, and horribly offensive; the urine scanty, red, and often bloody; the pulse small, frequent, and often intermitting, accompanied with palpitation of the heart and syncope, difficult respiration and cold sweats; swelling and itching of the whole body, which occasionally becomes covered with livid blotches; great prostration of strength, and paralysis of the feet and hands; delirium; convulsions; urine high colored, often bloody; strenuous priapism; and death.

Morbid Appearances. The mouth and œsophagus are seldom inflamed; but the stomach most commonly, although not always, presents appearances of intense inflammation, but not amounting to erosion or abrasion of the villous coat; and it is on the surface of such inflamed spots that grains of the acid are generally found, when the poison has been swallowed in powder. The inflammation is evident also in the duodenum, jejunum, and ileum; but it almost disappears in the colon, although the mucous membrane of the rectum is often found not only highly inflamed, but ulcerated. The lungs are sometimes black, and turgid with blood; the mitral and tricuspid valves of the heart are covered with red patches, and these extend to the fleshy columns; but the chief morbid appearances are to be looked for in the stomach and intestines. The contents of the former of these, and of portions of the latter, ought in every case to be carefully preserved, and washed in tepid *distilled* water. Cases have proved fatal in which no morbid changes have been detected.

Tests. If any solid particles be found in the stomach, throw a few of them upon red-hot coals, they will be decomposed, and exhale alliaceous vapor; or mix one part of them with three parts of a mixture consisting of one part of finely-powdered charcoal, and two parts of very dry carbonate of potassa; pul this into a small glass tube, the upper inner surface or empty part of which is kept clean, whilst the powder is introduced, by being previously lined with paper. Having withdrawn the paper, stop the open end loosely with a little tow, or a piece of soft paper; then place the closed end for a few minutes in the flame of a spirit-lamp until it becomes incandescent; when, if arsenious acid be present, a brilliant metallic crust will be found lining the upper part of the tube. This crust, placed on hot coals, will exhale dense white fumes and a strong smell of garlic.

If no solid particles be found, boil the contents of the stomach with liquor potassæ, and strain through a piece of linen rag; divide the fluid into different portions, and test each portion separately by the following re-agents:—

1. Put one portion into Marsh's apparatus for the formation of arseniuretted hydrogen gas, with some diluted sulphuric acid and a piece of pure zinc, and inflame the gas evolved at the jet. If arsenious acid be present, a piece of glass held over the flame will display a spot of metallic arsenic, surrounded by a circle of black oxide of arsenic, which will be surrounded by a second circle of arsenious acid; or pass the arseniuretted hydrogen gas through a bent tube, and heat it, at a point a few inches from the jet, in the flame of a spirit lamp; a crust of metallic arsenic will line the tube on the farthest side of the heated point.

The grains picked out of the stomach may be tested in the same manner. This test is decisive, but it requires to be used in the following manner, if the contents of the stomach contain much fatty matter. Take a bell glass, open at the top and furnished with a stop-cock and glass jet; fill it with hydrogen gas; place it in a jar containing the contents of the stomach strained, and the washing of the stomach, and some diluted sulphuric acid and pure zinc. Open the stop-cock until the fluid rises considerably into the bell glass; then close the stop-cock; but after the gas has been extricated, and the fluid has descended, open it again, inflame the gas at the jet, and use it in the same manner as Mr. Marsh's instrument. A better mode is the modification of Marsh's apparatus proposed by the author. (See *Pharmaceutical Trans., by T. Bell*, p. 92.)

2. Drop into the second portion a solution of nitrate of silver to excess, in order to precipitate all the hydrochlorates it may contain; then, after the fluid has become clear, touch the surface with a glass rod dipped in liquid ammonia. If arsenious acid be present, a yellow arsenite of silver will fall from the point of the rod.

3. Drop into the third portion some ammoniated sulphate of copper; if arsenious acid be present, Scheele's green will be formed. The accordance of these tests affords sufficient evidence. The tubes, and the glass, coated with the metallic arsenic, should be taken into court; as well as comparative tubes and glasses coated by treating the simple acid and its solution. All of these tubes should be previously rolled up in paper, and sealed in the presence of the persons who assist in the testing.

Treatment. If vomiting does not already exist as a direct effect of the poison, sulphate of zinc may be exhibited, and the emetic effects promoted by mucilaginous drinks, such as linseed tea When sulphate of zinc cannot be procured, a good substitute for an emetic is powdered mustard, in the proportion of from one to two teaspoonfu's in a glass of water, administered at intervals; or, evacuate the stomach by the stomach pump, using lime-water instead of distilled water; administer large draughts of oil, and of tepid, mucilaginous fluids, or sugar and water, or chalk and lime water; avoid the use of alkalies; but administer charcoal and hydrated sesquioxide of iron. This preparation is believed by some to be an effectual chemical antidote to arsenic; although Dr. A. Taylor (of London) has come to the conclusion, from a series of carefully conducted experiments, that the *oxide of iron* does not possess the power of combining with *powdered arsenious acid*, the only form in which we commonly have to deal with the poison, in a way to act as a chemical antidote; and that if recoveries have really taken place from its use, it must have some other operation. It should be immediately administered in large and frequently repeated doses, in conjunction with warm mucilaginous drinks, and also given by enema. About ten parts of the hydrated iron, it is said, will convert one part of arsenious acid into the basic salt of iron. ℥ ss. of the iron has been successfully given in doses repeated every fifteen minutes, till ℥ viij. were taken in twenty-four hours. If the hydrated oxide is not at hand, the *carbonate* may be substituted. It is recommended to add fifteen to twenty drops of liquor ammoniæ to each dose, in order to transform the arsenic into a soluble arsenite. Castor oil, and other laxatives, are to be afterwards employed. (*Ferrugo*, E.) Afterwards combat the inflammatory symptoms by bleeding freely, both generally and locally; by tepid baths, emollient enemas, and narcotics. If the immediate fatal symptoms be averted, let the patient for a long time subsist wholly on farinaceous food, milk, and demulcents.

⁂ All arsenical poisons operate nearly in the same manner as the arsenious acid; and consequently similar means are required for detecting their presence and counteracting their influence.

ATROPA BELLADONNA; see *Deadly Nightshade.*

BELLADONNA; see *Deadly Nightshade.*

BICYANIDE OF MERCURY, (*Hydrargyri Bicyanidum.*) An acrid mineral poison.

Symptoms. They closely resemble those of poisoning by corrosive sublimate, accompanied with severe vomiting, mercurial ulceration of the mouth, salivation, powerful action of the heart, diarrhœa, suppression of urine, demi-erection, and an ecchymosed appearance of the penis and scrotum, convulsions, and death.

Tests. When any of the poison remains, it is recognized by its quadrangular prismatic crystals, with oblique summits, and its styptic taste. When heated in a small tube closed at one end, and drawn out to a point at the other, it is decomposed, mercury sublimes, and cyanogen gas is given off, and burns with a violet flame. Its solution is decomposed by a stream of sulphuretted hydrogen gas, and sulphuret of mercury and hydrocyanic acid are formed.

Treatment. The same as in cases of poisoning by bichloride of mercury.

BLISTERING FLIES, (*Cantharis Vesicatoria.*) An acrid animal poison.

Symptoms. Nausea; vomiting and purging, the matter ejected in either case being frequently bloody and purulent; acute epigastralgia; writhing colic; great heat and irritation of the bladder and urinary organs, accompanied with the most painful priapism; the pulse is quick and hard; and although thirst is often great, yet there is occasionally a horror of liquids. If these symptoms be not soon relieved, they are followed by convulsions, tetanus delirium, syncope, and death. Throughout the attack, the breath of the patient has a very peculiar, faint, sickly odor.

Morbid Appearances. Inflammation and erosion of the stomach; the green, shining particles of the powdered flies being sometimes seen adhering to the inner coat of the viscus or mixed with its contents. The intestines also and the kidneys exhibit marks of inflammation; and these are still more evident in the bladder, particularly when the fatal result does not immediately supervene.

Tests. The poisonous properties of the blistering fly depend on a peculiar principle which has been named *cantharidin*; but the poison can be recognized by the appearance of the green, shining particles, which are visible in the finest powder, and by the symptoms. The alcoholic solution is precipitated white by water, but the precipitate is again dissolved by an excess of water.

Treatment. Copious dilution with milk and demulcent fluids, bleeding, the warm bath, opiate frictions, and clysters of mutton broth and oil, and opium. The best antidote is camphor, both internally administered and externally applied.

BROMIDE OF POTASSIUM, (*Potassium Bromidi.*) An acrid mineral poison.

Symptoms Nausea, vomiting, quickened respiration and pulse, great prostration of strength, death.

Morbid Appearances. Congested state of the mucous membrane; spots of ulceration, softenings.

Tests. If any of the poison remain, dissolve and drop into the solution sulphuric acid, the color and odor of free bromine are perceived. Add mucilage of starch, it will be colored yellow. Take up the bromine with æther, and drop into the æthereal solution a solution of nitrate of silver: a whitish-yellow bromide of silver, insoluble in nitric acid and in ammonia, will fall.

Bromide of Potassium does not alter the color of tea, or coffee, or milk, or wine. To detect it in these fluids, evaporate to dryness, decompose the vegetable matter by heat, and act on the residue in the same manner as on the pure bromide.

Treatment. Empty the stomach with the stomach-pump and tepid water. Treat the nervous symptoms by stimulants.

BRUCIA, (*Brucia.*)

Symptoms. The same as those caused by strychnia.

Tests. Brucia has a bitter taste. It is scarcely soluble in water at 60°, and it requires 500 parts of boiling water for its solution. It is dissolved and colored blood-red by nitric acrid; and, on the addition of a solution of protochloride of tin, the red is changed to a beautiful deep violet.

Treatment. The same as for poisoning by strychnia.

BRYONY ROOT, (*Bryoniæ Dioicæ Radix.*) An acrid vegetable poison.

Symptoms. Violent vomitings, with severe colic pains and purging, great thirst; difficulty of breathing; and sometimes convulsions.

Morbid Appearances. Evidences of inflammation of the mucous membrane of the stomach and rectum, and congestion of blood in the lungs.

Test. The poison can only be recognized when the root itself or a portion of it, can be obtained. It is large, fleshy, fusiform, marked externally with circles of a yellowish-white color, and has a sweetish, yet acrid and bitter, disagreeable taste.

Treatment. Excite vomiting by copious draughts of tepid demulcent fluids, and by irritation of the fauces; then administer milk and mucilaginous diluents, with opiates and emollient enemas, The lancet may sometimes be requisite.

CAMPHOR, (*Camphora.*) A narcotic, vegetable poison.

Symptoms. Violent excitement of the brain and nervous system; vomiting; vertigo, preceded by pallid countenance; great anxiety; small pulse; difficult respiration, syncope, cold sweats, and convulsions. In some instances it has occasioned death.

Morbid Appearances. Too few opportunities have occurred for ascertaining these with any degree of accuracy.

Test. The camphor would probably be found in the state of lumps, or dissolved in spirit. No difficulty would occur in identifying this substance, except perhaps in a case where it had proved fatal and existed in the contents of the stomach. Its presence would be immediately known by its powerful and peculiar odor. If it were diffused in the form of lumps or powder, these might be easily separated from the contents, owing to the great insolubility of this substance. In general, it might be expected that some portions would float to the surface of the water. In a doubtful case the contents of the stomach should be treated with a large quantity of alcohol:—the alcoholic liquor filtered, and the camphor separated by adding water. It is a white solid,—possessing a well-known odor,—easily dissolved by alcohol, and again separated by water,—entirely volatile without residue, and burning with a rich yellow smoky flame.

Treatment. Wine and opium, exhibited at short intervals until the symptoms abate.

CANTHARIDES; see *Blistering Flies.*

CARBONATE OF BARYTA, (*Carbonas Barytæ.*)

CARBONATE OF LEAD, (*Plumbi Carbonas.*) An astringent metallic poison. (All the salts of lead are resolvable into the carbonate, which is the only direct poison of lead.)

Symptoms. Obstinate costiveness; violent colic, with retraction of the abdomen; vomiting; the pulse small and hard; laborious breathing and tremors, terminating in paralysis of the extremities, and occasionally in death. The gums assume a blue tinge.

Morbid Appearances. An ex-sanguine appearance of the intestines; but occasionally there is inflammation of the mucous membrane of the intestines, sometimes attended with blotches of extravasated blood. When the death of the patient is not sudden, the mesenteric and lymphatic glands are inflamed and obstructed; and all the viscera bear more or less evidence of having suffered from increased vascular action.

Test. When the poison has been swallowed in the solid form, and any of it can be obtained, it may be known in some degree by its color and weight, or by rubbing it in a mortar with a little spirituous solution of guaiac, and a few drops of liquid ammonia, which produce a beautiful grass-green, passing to glaucous when lead is present; it is tinged brown when it is exposed to sulphuretted hydrogen gas; but is still more certainly detected by reducing it to a metallic state upon charcoal, by means of the blowpipe.

When it has been taken in syrup, or in wine, or in hollands, to improve which it is often ignorantly and improperly used, first render the colored fluids colorless by chlorine, and then add to different portions the following re-agents:—Sulphate of potassa, which will produce a white; sulphuretted hydrogen, which will throw down a black; and chromate of potassa, which will exhibit a canary-yellow precipitate, if any salt of lead be present; or dissolve in acetic acid, and add to the solution a solution of iodide of potassium; if the poison be carbonate of lead, a yellow iodide of lead will be precipitated.

Treatment. Bleed, if the pulse be hard; then freely exhibit cathartics, particularly castor oil, and sulphate of magnesia combined with opium or extract of hyoscyamus; use the warm bath, and throw up repeatedly injections of mutton broth and demulcents. The patient should dilute very freely with mucilaginous liquids. Some alkaline sulphate, mixed with vinegar, or some weak vegetable acid, such as lemon juice, will prove highly useful. Emetics and the stomach-pump should also be employed. When convalescent, he should live almost entirely on a milk diet. If paralysis of the limbs continue, it should be treated with strychnia.

As the symptoms produced by poisoning by lead put on one of the three forms, *irritant poisoning*, *lead colic*, and *paralysis*, our treatment must be governed accordingly. In cases of *irritant poisoning*, we should immediately administer diluents holding in solution some sulphate, as of soda, magnesia, or potassa, so that a sulphate of lead may be formed. Vomiting should be excited by sulphate of zinc, tickling the throat, or the contents of the stomach may be evacuated by the stomach-pump. In *lead colic*, the best remedy is *alum*, though it is generally treated successfully by means of purgatives and opiates, with venesection, leeching, &c. In *lead palsy*, *strychnine* is one of the best remedies.

⁂ The action of acetate of lead, and of red oxide of lead or litharge, on the animal economy, is nearly the same as that of the carbonate of lead; consequently, the above observations apply to all the salts of lead, which, as I have already said, are converted into the carbonate, after being taken into the stomach.

CARBONIC ACID GAS. This gas is often extricated very largely in various processes of art, and in burning charcoal in close rooms, so as to produce suspended animation and death. As it is also very heavy, it remains in fermenting vats and beer cellars long after the liquor has been drawn off or removed, so as to destroy individuals who incautiously enter them.

Symptoms. Great drowsiness, difficulty of respiration and suffocation. The features appear swelled, and the face bluish, as in cases of strangulation.

Test. Invert immediately, before the air of the place has been disturbed, a bottle filled with lime water, in the atmosphere which has occasioned the suspended animation or the death of the person immersed in it, until one-half of the fluid runs out; and at the same time introduce a lighted taper into the same atmosphere. If the taper be extinguished, and lime-water, on being shaken in the bottle, become milky, the deleterious gas is carbonic acid gas.

Sometimes a medical jurist may be required to state, for the purposes of justice, the nature of the gaseous mixture in which a person may have died. He will have but little difficulty in determining whether carbonic acid gas is the deleterious agent in such a mixture. When it exists in a confined atmosphere, its presence may be identified, if previously collected in a proper vessel, by the following characters. 1. It extinguishes a taper if the proportion be above twelve or fifteen per cent., and from the extreme density of the gas, the smoke of the extinguished taper may be commonly seen to float on its surface. 2. Lime-water, or a solution of subacetate of lead, is instantly precipitated white when poured into a jar of the gas, and the precipitates thus formed, may be collected by filtration, and proved to possess the well-known properties of carbonate of lime or lead. Air containing only one per cent. of carbonic acid scarcely affects lime-water. 3. When a solution of chloride of lime, colored by litmus, is added, the blue color, on agitating the liquid in the gas, is discharged. This clearly distinguishes carbonic acid from nitrogen.

The proportion in which carbonic acid exists in a mixture, may be determined by introducing into a given quantity in a graduated tube over mercury, a strong solution of caustic potash. Absorption will take place after a certain time, and the degree of absorption will indicate the proportion of carbonic acid present. When this destructive agent exists in a confined spot, as in a well or cellar, it may be generally got rid of by placing within the stratum a pan containing the hydrate of lime, loosely mixed into a paste with water, or by exciting combustion at the mouth of the pit. Lives are often successively lost on these occasions, one individual descending after another, in the foolish expectation of at least being able to attach a rope to the body of his companion. The moment that the mouth falls within the level of the stratum, all power is lost, and the person commonly sinks lifeless.

The gas may be collected by lowering a bottle filled with fine sand by means of a string attached to the neck, guiding the bottle by another string attached to its base. When the bottle is within the stratum it should be turned with its mouth downwards, then rapidly raised with its mouth upwards, by pulling the string attached to the neck.

Treatment. Remove the patient into the open air, and place him on his back with his head elevated; dash cold water over the body, and abstract a small quantity of blood by venesection or cupping; apply friction, particularly over the thorax and on the soles of the feet; then endeavor to stimulate the organs of respiration to a renewed action by inflating the lungs with common air, or, if it can be procured, oxygen gas, by means of the double bellows, and a flexible tube introduced into the trachea through the nostrils. Artificial respiration may be produced, to a certain extent, by pressing down the ribs, and forcing up the diaphragm, and then suddenly removing the pressure. As soon as the patient can swallow, stimulants should be administered. Stimulate, cautiously, the nostrils with ammonia, and dash cold water on the face and chest.

CHLORIDE OF ANTIMONY. (*Butter of Antimony.*) This is a highly corrosive liquid, varying from a light yellow to a dark red color;—in the latter state containing generally a large quantity of iron. It is a powerful poison, but it is not often taken as such. Orfila mentions only one, and that a doubtful instance, which occurred nearly two hundred years ago.

Morbid Appearances. On inspection, the interior of the alimentary canal, from the mouth downwards to the jejunum, presents a black appearance, as if the parts had been charred. In general, there is no mucous membrane remaining, either on the stomach or elsewhere;—only a flocculent substance, which can be easily scraped off with the back of the scalpel, leaving the submucous tissues and the peritoneal coat. All these parts are so soft that they may be easily torn with the fingers.

Tests. If any portion of the chloride be left in the vessel, it may be tested by adding a few drops to a large quantity of water, when the whitish-yellow oxychloride of antimony will be precipitated: the supernatant liquid containing muriatic acid, which may be detected by nitrate of silver. The only objection to this mode of testing is, that the salts of bismuth are also decomposed by water; but the precipitate in this case is insoluble in tartaric acid, and is blackened by hydrosulphuret of ammonia; while in the case of antimony, it is soluble in that acid, and is changed to an orange-red by the hydrosulphuret. If the chloride contain much iron, it will be proper to separate the white precipitate, and wash it thoroughly with water, before adding the hydrosulphuret, or the presence of iron will conceal the orange-red color. A piece of copper, when heated in a solution of chloride of antimony, is immediately coated with a layer of that metal of a grey color, like arsenic.

Solutions of tartar emetic and chloride of antimony are very differently affected by tests. Nitric acid precipitates the former, but not the latter. Ferrocyanate of potash has no effect on solution of tartar emetic, but it precipitates the chloride of antimony of a yellow-white; or if much iron be present, Prussian blue is abundantly thrown down.

The chloride, as a corrosive, combines with the animal tissues. It may be separated in such cases by boiling them in muriatic or intromuriatic acid. In this way, the organic matter will be decomposed.

CHLORIDE OF BARIUM; see *Muriate of Barium.*

CHLORIDE OF LIME.

Symptoms. Pain and heat in the stomach, vomiting, purging; also acts upon the nervous system.

Treatment. Administer albuminous liquids, as eggs, beat up with water, or flour and water, or oil, or mucilaginous drinks, and excite vomiting. Combat the gastro-enteritis by the usual means; carefully avoid the use of all acids, which would cause the evolution of chlorine gas in the stomach.

CHLORIDE OF SODIUM. The chloride of sodium may be identified by the following chemical characters:—1. It is easily dissolved by water, and a portion of the solution slowly evaporated on a slip of glass, yields well-defined *cubic* crystals.—2. It is insoluble in alcohol.—3. It yields abundant acid vapors with a kind of effervescence, when strong sulphuric acid is poured on it. These vapors form a dense white solid cloud, when a rod dipped in strong ammonia is brought near them.—4. It yields chlorine gas when heated with equal parts of sulphuric acid, water, and peroxide of manganese;—the chlorine being recognized by its usual characters. About one-twentieth of a grain of the chloride may be in this way analyzed, if the experiment be performed in a proportionately small tube.—5. The solution of the salt gives an abundant white clotted precipitate with nitrate of silver—possessing all the chemical properties of chloride of silver. These properties of the precipitate must be positively determined, since there are numerous other salts which are precipitated white by nitrate of silver. These experiments, it will be perceived, merely indicate the presence of chlorine or muriatic acid. The characters of soda will be given hereafter. A chloride is also known by boiling it in a solution of arsenious acid and sulphuric acid, and immersing a slip of bright copper;—if the salt be a chloride, the copper is covered with a grey coat of arsenic.

Quantitative Analysis. This may be performed by estimating the quantity of muriatic acid from the quantity of chloride of silver obtained from the whole, or a fractional part of the liquid subjected to analysis. For every 100 grains of the thoroughly dried chloride of silver, we may allow 69 grains of liquid muriatic acid of the ordinary pharmacopœial strength.

CHLORINE GAS An acrid poison.

Symptoms. Severe constriction of the glottis, cough, sensation of suffocation alternating with asphyxia; afterwards, if death do not ensue, inflammation of the larynx, and pneumonic inflammation.

Treatment. Inhalation of the vapor of hot water containing carbonate of ammonia. Bleeding, the antiphlogistic treatment, especially by mercurials.

COCCULUS INDICUS. (*Menispermi Cocculi fructus*.) An acro narcotic vegetable poison, deriving its poisonous powers from *picrotoxia*.

Symptoms. These closely resemble those of intoxication from ardent spirits.

Morbid Appearances. There is no instance of the examination of a human body destroyed by this poison on record.

Test. That this poison has been the cause of death, or of powerfully deleterious effects on the human body, cannot be ascertained by any test. The fruit is externally blackish, about the size of a pea, whitish within, and has a bitter taste, not easily removed from the palate.

Treatment. Encourage vomiting, and purge freely; bleed if the pulse indicate it, or if symptoms resembling apoplexy supervene

COLCHICUM; see *Meadow Saffron*.

COLOQUINTIDA. (*Fructus Cucumeris Colocynthidis.*) An acrid vegetable poison.

Symptoms. Violent pains in the epigastrium, with vomiting and purging, the stools being mixed with blood. The sight soon becomes obscured, and this state is succeeded by vertigo and delirium.

Morbid Appearances. When death has occurred from this poison, the stomach and bowels have been found inflamed, particularly the rectum.

Test. A strong infusion of coloquintida gelatinizes as it cools, resembling in appearance mucilage of quince seed; but it has a very bitter, nauseous taste. Solution of potassa renders it greenish, and throws down a precipitate; ammonia dissolves the mucilage. But no test can be relied on; the only certainty that this poison has been taken is the seeing the substance itself.

Treatment. Emetics to evacuate the whole of the deleterious substance; local blood-letting on the abdomen; afterwards opiates, and copious dilutions with milk and oily demulcents.

CONGER.

Symptoms. This fish, although it is frequently eaten with impunity, yet has, in some instances, produced all the symptoms of cholera morbus, succeeded by paralysis of the lower extremities.

Treatment. Evacuate the contents of the stomach and bowels, after having allayed their irritability by opium. Dilute freely with saccharine and acidulous liquids; and bleed, if symptoms of inflammation of the lower bowels supervene.

COPPER, AND ITS COMPOUNDS. Copper itself is said to be destitute of poisonous properties; but it would appear that when alloyed with other metals, and reduced to a finely pulverulent state, it may act as a poison.

Sulphate of Copper.—All the salts of copper are poisonous. The two most commonly known are the *sulphate* (*Blue Vitriol*) and the *subacetate* (*Verdigris*.) These substances have been frequently taken and administered in large doses for the purposes of suicide and in attempts at murder. In the latter case, the attempt has been immediately discovered, owing to the strong metallic taste possessed by the salt. This would in general render it impossible that, the poison should be taken unknowingly. With the exception of these salts, poisoning by copper is generally the accidental result of the common use of this metal for culinary purposes.

Symptoms. Sulphate of copper has been frequently given for the purpose of procuring abortion. In doses of half an ounce and upwards it acts as a powerful irritant, and in very young children a much less quantity would suffice to kill. The salt speedily induces vomiting of the most violent kind; and this sometimes effectually expels the poison from the stomach, and the person recovers. The vomited matters are remarkable for being of a blue or green color, and broken crystals of blue vitriol have been discovered in them, where the poison was taken in a loosely pulverulent state. There is pain in the abdomen, with diarrhœa, and in aggravated cases spasms of the extremities. Dr. Per [illegible] a case where the most violent convulsions were produced in a young female by two drachms of the sulphate of copper;—she eventually recovered. Paralysis, insensibility, and even tetanus, have preceded death, when the poison was administered to animals.

SUBACETATE OF COPPER (*Verdigris*),—produces somewhat similar symptoms. Vomiting of a green-colored liquid and diarrhœa are the most prominent symptoms. In a case reported by Pyl, a woman who took two ounces of verdigris, died in three days:—in addition to the symptoms above described, there were convulsions and paralysis before death. Niemann relates that a female, aged 24, swallowed half an ounce of verdigris, and died under symptoms of violent gastric irritation in sixty hours.

There is but little doubt that all the other salts of copper would act in a similar way. Experiments on animals show that they are irritant poisons.

Morbid Appearances. The mucous membrane of the stomach and intestines has been found more or less inflamed in the few fatal cases which have been examined,—the membrane has been found also eroded and softened in poisoning by verdigris. The œsophagus has presented an inflammatory appearance. The lining membrane of the alimentary canal is often throughout of a deep-green color, owing to the small particles of verdigris adhering to it. It has been said that this is an uncertain character of poisoning by copper; since a morbid state of the bile often gives a similar color to the mucous membrane of the stomach and duodenum. This objection cannot apply, where the green color is also found in the œsophagus, and throughout the intestines; and, under any circumstances, the evidence from the presence of a green color would amount to nothing in the judgment of a prudent witness, unless copper were freely detected in the parts so colored.

Treatment. In general there is violent vomiting,—the salts of copper acting powerfully as emetics. The efforts of the stomach should be promoted by the free exhibition of warm water, milk, or any mucilaginous drink, and the use of the stomach-pump. This latter instrument would be of little use, where the poison has been taken in coarse powder, as is generally the case. Various antidotes have been proposed. Sugar was formerly strongly recommended, on the principle that it had the property of reducing the salts of copper to the state of insoluble suboxide; but Vogel found that this chemical effect was chiefly confined to the subacetate, and in order that it should take place it was necessary that the substances should be heated to 212°. M Pastel has since asserted, that the same decomposition goes on between these substances at the temperature of the stomach, and even at the ordinary temperature (Annales d'Hyg., 1833); he is therefore inclined to regard it still as an antidote, although it seems that animals to which he administered it died; but not so rapidly as when the poison was allowed to act by itself. Albumen is well known to form an insoluble compound with oxide of copper, provided the albumen be in very large excess; for the albuminate of copper is easily dissolved by an excess of the solution of sulphate. How far this would act on the comparatively insoluble acetate, it is difficult to say; as also whether it be not itself a poison; still it may reduce the activity of the soluble salts of copper, and thus it would be advisable to administer it conjointly with the other means recommended. Dr. Edwards, some years since, recommended the use of iron filings for precipitating the copper; but the action in this case is too slow, and is immediately arrested by the iron becoming enveloped by a thin film of copper. If it even precipitated all the copper in the metallic state sulphate of iron would be found in the stomach, and this is itself an irritant. The hydrated oxide of iron has been used in Germany in poisoning with arsenite of copper. A child swallowed a small quantity of green paint containing arsenite of copper: violent vomiting supervened with coldness of surface,—milk was given, and afterwards the hydrated oxide of iron. In five hours the vomiting had abated, and the child recovered.

Tests. The salts of copper are generally known by their color: whether in the solid state or in solution, they are either blue or green;—the salts of one other metal are also of a green color, namely nickel; but there are striking chemical differences between the salts of this metal and those of copper. There are three very soluble salts of copper; two of these are blue,—the sulphate and nitrate, and one green, the chloride. The salt should be dissolved in water, diluted, and the following *tests* may be then applied. The solutions of the cupreous salts generally have an acid reaction. 1. Solution of ammonia: this gives, in a solution of copper, a bluish-white precipitate, which is soluble in an excess of the test, forming a deep violet-blue solution. 2. Ferrocyanate of potash, a rich claret-red precipitate;—if the quantity of copper be small, the liquor acquires merely a light red-brown color. 3. Sulphuretted hydrogen gas, or hydrosulphuret of ammonia, gives a deep chocolate-brown precipitate, or merely a brown color if the copper be in small proportion. 4. A slip of polished iron (a common needle) suspended by a thread in the liquid, is speedily coated with a layer of copper, even where the salt is in very small proportion When much diluted, a drop of dilute sulphuric acid may be added. If the needle be left for some days in the liquid, the iron will be slowly removed, and a hollow cylinder of metallic copper will remain. This may be dissolved in dilute nitric acid, and tested with the foregoing tests. Half a grain of sulphate of copper, dissolved in sixteen ounces of water, may be thus easily detected. Among these tests the ferrocyanate of potash and sulphuretted hydrogen gas will produce a marked action on a quantity of the cupreous salt, in which polished iron has no effect. Ammonia fails to indicate with any certainty less than the 100th part of a grain of sulphate in one fluid drachm of water; but the ferrocyanate of potash and hydrosulphuret of ammonia produce an evident effect on a solution containing only the 250th part of a grain of sulphate in half a drachm of water. The iron test failed to detect the 150th part of a grain in a fluid drachm of water. It is, however, sufficiently delicate for most practical purposes. 5. If a few drops of the copper solution be placed on platina foil,—slightly acidulated with a diluted acid, and the platina be then touched through the solution with a thin slip of zinc, metallic copper of its well-known red color, is immediately deposited on the platina. When the quantity of copper is small, there is merely a brown stain. This test is not so delicate as the iron test.

Sulphate of Copper. (*Blue Vitriol. Roman Vitriol. Blue Stone.*)—This salt is met with in rhombic masses, transparent, and of a rich blue color. When reduced to powder it is nearly white, but becomes again blue on melting or dissolving it. It is soluble in four parts of cold and two of boiling water, and is easily obtained in well-defined rhombic crystals by evaporating a small quantity of the solution on a slip of glass. The powder undergoes no change on adding sulphuric acid. Nitrate of barytes added to the solution, indicates the presence of sulphuric acid.

Ammonio-Sulphate.—This forms a rich violet-blue solution, and is known from the sulphate by producing a green precipitate with a solution of arsenious acid. The sulphate is unaffected by a solution of arsenious acid.

Nitrate.—It is crystallized in prisms of a deep blue color, and very deliquescent,—extremely soluble in water, and the solution is not precipitated by nitrate of barytes or nitrate of silver. When the powdered crystals are mixed with tin filings and moistened with water, nitrous acid fumes are evolved. By adding carbonate of potash to the solution, and filtering, nitrate of potash is obtained in the filtered liquid, and the acid may be thereby identified.

Chloride.—This is seen in deliquescent crystals of an emerald green color. It is very soluble in water, forming a deep-green solution, if concentrated; but becoming blue when diluted. This diluted solution has the remarkable property of becoming green when heated to 212°, and again blue on cooling. It yields an abundant white precipitate with nitrate of silver insoluble in nitric acid, by which it is easily known.

The insoluble salts of copper, which may give rise to questions of poisoning, are the subacetate, subchloride, carbonate, and arsenite. They possess these common characters,—that when rubbed on a steel spatula with a few drops of diluted sulphuric acid, metallic copper is abundantly precipitated on the iron;—and when dropped in a strong solution of ammonia, they acquire a rich violet-blue color.

Subacetate. (*Artificial Verdigris.*)—There are several varieties of this salt, some of which are blue, and others green. Verdigris is partially soluble in water; but if this be acidulated with acetic or muriatic acid, a solution is immediately obtained, to which the tests for copper may be readily applied. If a portion of the powder be heated in a reduction tube, a film of metallic copper is produced,—and acetic acid vapor escapes. Acetic acid is, however, readily discovered by boiling the powder in dilute sulphuric acid. Sulphate of copper is at the same time produced, which admits of a ready analysis.

Subchloride. (*Oxychloride. Brunswick Green.*)—This is a rich green compound, which is formed where common salt has been used in a copper vessel, and has thus given rise to accidental poisoning. It is insoluble in water; but is easily dissolved by nitric or muriatic acid, and the acid solution will give all the reactions for copper. The simplest way of analyzing this compound, is to boil it in caustic potash:—when black oxide of copper is separated. This may be washed, dissolved in an acid and tested, while the chlorine may be detected in the filtered alkaline liquid on acidulating with nitric acid and adding nitrate of silver. This test will also detect the chlorine in the nitric acid solution of the subchloride.

Carbonate.—This is a bluish green compound, which is produced in firm crusts, when copper, brass, or bronze is exposed at the same time to the action of water and air. It is often called verdigris to distinguish it from the subacetate or artificial verdigris. When heated on platina foil, carbonic acid is evolved, and black oxide of copper is left. It is insoluble in water; but is dissolved by acids with effervescence, a character which distinguishes it from the other insoluble salts. The acid solution gives the usual reactions with the tests for copper.

Arsenite of Copper. (*Scheele's Green.*)—This is a powerful poison of a green color, the depth of which is greater in proportion to the quantity of oxide of copper present. Its poisonous properties are chiefly due to the arsenic contained in it. It is insoluble in water, but soluble in ammonia and the acids. When very gently heated in a reduction tube, arsenious acid is sublimed in minute octohedral crystals. These may be dissolved in water and tested in the usual way—the residuary oxide of copper may be dissolved in nitric acid and tested. With charcoal powder, the arsenite gives, although with some difficulty, a ring of metallic arsenic; but its nature is easily determined by boiling it with diluted muriatic acid and a slip of bright copper. Metallic arsenic is immediately deposited on the copper. This compound is extensively used as a pigment in the arts:—it is also improperly employed to give a green color to wafers and to articles of confectionery. Dr. Geoghegan informed us that an accident occurred in Dublin, in 1842, by which fourteen children suffered from symptoms of poisoning in consequence of their having eaten some confectionery ornaments colored with Scheele's green. In two or three of these cases jaundice followed.

Schweinfurth Green.—This is a mixture of arsenite and acetate of copper. The presence of arsenic in this compound is easily detected by muriatic acid and copper. The arsenite of copper has been placed among cupreous poisons; because it so closely resembles them in physical and chemical properties;—and the existence of arsenic in it might be easily overlooked On the whole, these salts of copper are seldom used as poisons; although so easy of access, that they are to be purchased without difficulty in any color shop. During the years 1837–8, there was not a single fatal case recorded of poisoning by copper throughout England and Wales.

Copper in Organic Mixtures.—The oxide of copper is liable to be precipitated by certain organic principles, as albumen, fibrin, and mucous membrane: but some of these organic compounds are easily dissolved by acids or even an excess of the cupreous salt. A portion at least of the salt of copper is, therefore, commonly held dissolved. In such cases, there is one peculiar feature possessed by these liquids, i. e., they have a decidedly green color, when the copper salt is in a far less than poisonous proportion. We first filter the liquid, and save the insoluble portions for a separate operation. We may use as a trial test, a needle—zinc and platina, or add to a portion, oxalic acid, the last gives a bluish white precipitate only when the copper is in moderately large quantity. If the needle be not coated with copper in the course of a few hours, it is certain that there is no detectable quantity of the poison present in the liquid. The needle experiment answers in spite of the presence of a large quantity of organic matter; and a very small quantity of a salt of copper may be thus easily discovered in tea, coffee, porter, or gruel, provided we take care to acidulate the liquid slightly with diluted sulphuric acid, before introducing the needle. The following is the result of an actual experiment: One-third of a grain of sulphate of copper was dissolved in water, and mixed with four ounces of thick gruel. Ammonia produced no effect on this liquid; and ferrocyanate of potash gave only a faint reddish brown discoloration. Two drops of diluted sulphuric acid were added to it, and a bright needle suspended in it by a thread. In twenty-four hours the needle was covered with a distinct film of metallic copper. The quantity of copper salt here present, was less than the 6000th part of the solution. If the needle be rusty, this experiment will fail. The smaller the quantity of copper, the longer the time required for the result to follow.

If the copper salt be present in large quantity, the trial tests will indicate it immediately. We now destroy the viscidity of the liquid by diluting it if necessary; and pass into it a current of sulphuretted hydrogen gas in order to precipitate all the copper in the state of sulphuret. The black sulphuret may be collected, washed, dried, and then boiled in equal parts of nitric acid and water for a quarter of an hour. Nitrate and sulphate of copper are produced and dissolved; a fact indicated by the liquid acquiring a rich blue color, and some sulphur is at the same time separated. This liquid, when filtered, will give the usual reactions with the tests for copper.

Quantitative Analysis. This is best determined by converting the salt of copper to the state of black oxide, every 100 parts of which, are equal to 32 of crystallized sulphate, and 392 of crystallized nitrate. If the cupreous salt be precipitated as sulphuret, this may be transformed to black oxide by digestion in nitric acid, and subsequent precipitation by potash.

CORROSIVE SUBLIMATE. (*Hydrargyri Bichloridum.*) A corrosive metallic poison.

Symptoms. An acrid, styptic, metallic taste, with the sensation of fullness and burning in the throat; copious salivation, but not always; great anxiety; tearing pains of the stomach and intestines; nausea; frequent vomiting of a fluid occasionally mixed with blood; diarrhœa; tenesmus; the pulse small quick, and hard; frequent faintings; universal debility; difficult respiration; cold sweats; cramps of all the members; convulsions; and death.

Morbid Appearances. General inflammation of the first passages swelling and a livid color of the palate and fauces; epiglottis, trachea, and bronchial tubes injected; œsophagus of a white color. In some cases red and black spots have been found in the cavities of the heart; constriction of the intestinal canal, with marks of gangrene, sometimes with perforation of the viscus; and in general the mucous membrane of the stomach is detached

Tests. 1. If the poison be found in the solid state, its nature may be suspected by its sensible qualities; but to ascertain the truth, mix the suspected substance with an equal weight of very dry carbonate of potassa; then put the mixture into a small glass tube, and heat it gradually to redness; if it be corrosive sublimate, mercury will be obtained in metallic globules.

2. If the suspected poison be a fluid and a colorless liquid, place in it a wire of clean polished copper twisted round a sovereign, and allow it to remain for a short time, when the gold will be covered with a white coating that will acquire a metallic lustre when rubbed, if corrosive sublimate be the poison: or pour into it lime-water, or liquor potassæ, which will produce an orange-yellow precipitate, if the salt be present. The solution of iodide of potassium will precipitate scarlet biniodide of mercury.

3. Drop a little of the solution on the back of a gold watch, and whilst holding the watch in one hand, touch it with a knife or a key held in the other; an amalgam will be instantly formed on the gold if the poison be corrosive sublimate.

4. If the solvent be wine, coffee, or any colored liquid, agitate it slowly for ten minutes in a phial, with two or three drachms of sulphuric æther; then after the fluids have separated by rest, pour off the æther, and evaporate it in a small porcelain capsule. If corrosive sublimate be present, it will remain in a crystallized form in the capsule; and that it is that salt may be proved by dissolving the residue in water, and precipitating, as already described, with lime-water, or solution of potassa, or iodide of potassium.

5. If we have only the contents of the stomach to act upon, coil a copper wire round a sovereign or a piece of gold, and having acidulated with nitric acid, drop this pile into the fluid. If corrosive sublimate be the poison, a precipitate of metallic mercury will be formed on the gold.

6. To the suspected solution, add a solution of protochloride of tin; then, after a short time, add more, and leave the precipitate to subside. Pour off the fluid, and wash repeatedly the precipitate; a globule of mercury will remain.

Treatment. Give large quantities of white of egg diluted in water, in repeated doses. The albumen decomposes the corrosive sublimate, and reduces it to a state of calomel, and the protoxide, which, acting on the bowels, carries itself off by purging. The poison is also reduced to calomel by a mixture of soap and the gluten of wheat flour. Bleeding is requisite if the pulse be quick and hard. The warm bath may also be employed; and during convalescence the patient should subsist altogether on broths, milk, and demulcent fluids

CREASOTE. An acrid poison.

Symptoms. It operates as a powerful topical excitant, causing inflammation of the tissue with which it comes in contact, and destroying life by the nervous sympathy it induces.

Tests. Distinguished by its odor, that of smoked meat and tar. It instantly coagulates albumen.

Treatment. Administer freely white of eggs, then give direct emetics. The prostration is to be counteracted by ammonia and other stimulants, oleaginous and mucilaginous drinks, venesection, artificial respiration when necessary; subsequent inflammatory symptoms to be combated in the usual way, as in a case of gastritis.

CUSPARIA, FALSE. Supposed to be the bark of Strychnos Nux Vomica. The symptoms it causes are similar to those from nux vomica.

est. Pieces rough, covered with a whitish dust, they have no odor, are intensely bitter, heavy, resinous in the fracture, inner surface reddened to blood color by nitric acid; the infusion reddens litmus; sesquichloride of iron changes it to green; ferrocyanate of potash to grass green.

Treatment; see *Nux Vomica.*

CYANODIDE OF MERCURY.

Symptoms. The same as produced by hydrocyanic acid; excites nausea and vomiting, and leaves traces of inflammation of the stomach.

Treatment. No chemical antidote is known. The contents of the stomach should be evacuated, and then administer stimulants, such as ammonia, æther, wine, and external friction, mustard, &c. When *muriatic acid gas*, or *hydrochloric acid gas*, as it is now called, has been inhaled, the patient should inhale the vapor of ammonia.

CYCLAMEN; see *Sow Bread.*

DEADLY NIGHTSHADE, (*Atropa Belladonna.*) An acro-narcotic vegetable poison.

Symptoms. A sense of great dryness and constriction of the pharynx and œsophagus; sickness, vertigo, dilated pupils and dimness of sight; laughter, delirium, redness and tumefaction of the face; convulsions. The stomach and bowels become sometimes so paralyzed, that vomiting can scarcely be produced by the most powerful emetics; and death follows.

Morbid Appearances. The body swells greatly after death, whilst blood flows from the nose, mouth, and ears, and rapid putrefaction ensues. The stomach and intestines display marks of high inflammatory action, and the vessels of the brain are generally found turgid with blood.

Test. There is no chemical test for ascertaining the presence of this poison in food; but the botanical characters both of the leaves and the fruit should be familiar to every practitioner. The berries, which are most likely to be eaten by children, are large, roundish, with a longitudinal furrow on each side, of a very deep purple color, smooth, shining, and seated within a permanent green flower cup or calyx. Their taste is sweet and agreeable.

Treatment. Give emetics of sulphate of zinc or of copper; then evacuate the bowels by active purgatives and clysters; and follow these by large doses of vinegar and water, or other vegetable acids. The previous use of vinegar has been recommended, and it is said the emetics act with more certainty after its use; after the vomiting, strong coffee proves very efficacious.

DIGITALIS; see *Foxglove.*

ELATERIUM, (*Momoridicæ Elaterii, fructus et fecula.*) An acro-narcotic poison.

Symptoms. Violent sickness, vomiting and hypercatharsis; the stools being of the most watery consistence; and followed by sudden and excessive debility, cold clammy sweats, and death.

Morbid Appearances. When the dose has been very large, the whole mucous membrane of the stomach and intestines appears in some degree inflamed; but when the fruit has been eaten, or the dose of the elaterium which has been taken is small, the rectum only presents marks of inflammatory action

Test. No tests are known for detecting this poison; the elaterium can be recognized by its physical qualities; the fruit is a hairy small pepo.

Treatment. Little is to be done except supporting the habit by cordials and opium, and the exhibition of enemas of starch, opium, and camphor

EUPHORBIUM ; see *Spurge*.

FOXGLOVE, (*Digitalis Purpureæ folia*.) An acro-narcotic vegetable poison.

Symptoms. Intermitting pulse, vertigo, indistinct vision, nausea, hiccough, cold sweats, delirium, syncope, convulsions, and death.

Morbid Appearances. The stomach and intestinal canal display scarcely any morbid alteration; but the lungs are crepitant, and the blood contained in the ventricles is generally in a fluid state.

Test. Unless the plant or the entire leaves be found in the recent or properly dried state, or the powder be procured, it is impossible to determine that this poison has been employed, except from the symptoms.

Treatment. Exhibit cordials, as, for example, brandy, aromatic confection, and opium; and apply a blister to the pit of the stomach.

FOOL'S PARSLEY, (*Æthusa Cynapium*.) An acro-narcotic vegetable poison.

Symptoms. Heat of throat, thirst, vomiting, and occasionally diarrhœa; difficult respiration; a small, frequent pulse; cephalalgia, vertigo, and delirium.

Morbid Appearances. Marks of inflammation in the œsophagus and stomach, the spleen livid, and the ventricles of the heart filled with black fluid blood.

Test. This plant is distinguished from parsley by the involucels, which consist of three long linear leaflets, pendent on one side of each umbel; by its nauseous odor, when the leaves are rubbed between the fingers, and the very dark-green color of the upper disc of its leaves.

Treatment. Give emetics and demulcent fluids in sufficient quantity to excite vomiting; bleeding and aperients.

FUNGUSES, comprehending AGARICS and POISONOUS MUSHROOMS, (*Fungi*.) Acro-narcotic vegetable poisons.

The poisonous fungi belong chiefly to the genus AMANITA, namely, *A. Bulbosa Alba*, *A. Citrina*, *A. Viridis*; to AGARICUS—*Ag. Acris*, *Ag. Piperatus*, *Ag. Pyrogalus*, *Ag. Stypticus*, *Ag. Urens*, and *Ag. Annularius*. The eatable are *Boletus Edulis*, *Amanita Aurentiaca*, *Morchella Esculenta*, *Merulius Cantharillus*, *Clavaria Ecralloides*, *Agaricus Esculentus*, and *A. Tortilis*.

Symptoms. Different funguses produce different effects on the animal system. The more general symptoms, which usually occur from six to twenty hours after eating them, are pains of the stomach, nausea, vomiting, and purging, colic, cramp of the lower extremities; convulsions, both general and partial; an unquenchable thirst, vertigo, delirium, coma, and death. The intellect remains entire to the last moment of life.

Morbid Appearances. Numerous black blotches on the skin over the surface of the whole body; the abdomen much blown up; the pupils contracted; the stomach and intestines inflamed, gangrenous, and strongly contracted in many places; the lungs inflamed, and gorged with black blood; the liver and spleen in the same state; the membranes of the brain, also, present marks of inflammation; and sphacelated spots are seen on almost every viscus. The blood is always found coagulated; and, in every instance, there is a remarkable flexibility of the members.

Test. There are no means of ascertaining that a person has been poisoned by these vegetables, unless some of the plants be found; in which case their deleterious properties are known by their botanical characters. As a general rule, those which have an acrid juice, a leathery dull-colored flesh, which grow in obscure, shady places, or on the trunks of decayed trees, or on rocks, which have a glary or very shining surface, or an offensive odor, or become brown when cut, are to be rejected.

They may be tested by cutting them and applying a piece of silver to the cut surface; if it be blackened, the mushroom is bad. Cooking fungi with vinegar or lemon juice aids greatly in destroying their poisonous properties.

Treatment. First evacuate the poisonous substances by emetics and purgatives, or by combinations of these; for example, three or four grains of tartar emetic, or twenty four of ipecacuanha powder in solution with two ounces of sulphate of soda. Castor oil is a valuable purgative in these cases. The lancet is sometimes necessary. After the stomach and bowels have been emptied, give small but repeated doses of æther in mucilage, and dilute with vinegar or other acidulated liquids. The debility subsequent to the effects of these poisons, when the fatal issue is averted, must be treated with cinchona and other tonics.

GAMBOGE, (*Cambogia.*) An acrid vegetable poison.

Symptoms. Violent vomitings, colic, and hypercatharsis, followed by great prostration of strength, and death.

Morbid Appearances. Slight inflammation of the mucous membrane of the stomach and intestines, and marks of strong vascular action in the rectum.

Test. This poison is easily detected by its beautiful yellow color, and the tinge it communicates to the whole mucous membrane of the intestines.

Treatment. Carbonate of potassa in demulcent and mucilaginous liquids, and milk, should be freely administered; and, after the poison is supposed to be wholly evacuated, small doses of opium at short intervals.

HELLEBORE ROOT—BLACK, (*Hellebori Nigri Radix.*) An acrid vegetable poison.

Symptoms. Severe pain of the stomach and intestines, violent vomiting, vertigo, excessive debility, salivation, convulsions, sometimes opisthotonos, sometimes emprosthotonos, and death It produces the same effects when it is applied to a wound.

Morbid Appearances. Evident signs of inflammation in the al mentary canal, but more particularly in the larger intestines. The limbs remain remarkably flexible after death.

Test. None.

Treatment. The poison is generally thrown out of the stomach by the vomiting it occasions. This should be assisted, however, by copious dilution with mild mucilaginous fluids; and be followed by bleeding, and other antiphlogistic measures.

HELLEBORE ROOT—WHITE, (***Veratri Albi Radix.***) An acrid vegetable poison, deriving its poisonous properties from a salt of veratria.

Symptoms. Vomiting and hypercatharsis, with bloody stools; great anxiety, tremors, vertigo, syncope, sinking of the pulse, cold sweats, convulsions, and death. Nearly the same symptoms are produced by the application of the root to an ulcerated surface.

Morbid Appearances. Slight inflammation of the stomach and bowels. Considerable inflammation of the rectum, which often presents sphacelated spots. The lungs are generally gorged with blood.

Test. None.

Treatment. Evacuate the stomach by copious draughts of oily and mucilaginous liquids, and exhibit emollient enemas to sheathe and soothe the rectum. Then administer acidulous fluids, coffee, and camphor, and bleed, in conjunction with other antiphlogistic measures. Allay the action of the poison on the rectum by emollient clysters. Hahnemann asserts that coffee is the antidote of this poison.

⁂ The same instructions will serve in cases of poisoning by *Fetid Hellebore, Bryony, Sabadilla, Ranunculus, Arum, &c.*

HEMLOCK, (***Conii Maculati folia et radix.***) A narcotic vegetable poison, deriving its deleterious properties from an alkaline principle called Conia.

Symptoms. Sickness, difficulty of respiration, great anxiety, vertigo; delirium, which often rises to maniacal phrensy; dilatation of the pupils, stupor, trismus, convulsions, and death.

Morbid Appearances. Scarcely any marks of inflammation are perceptible in the stomach or the intestines, except in the rectum, in which red blotches are observed. The vessels of the brain are gorged with very fluid blood; evidences of strong inflammation having existed in that organ, also present themselves.

Test. None. The plant has a biennial root, with circular marks; the stem is annual, herbaceous, striated, and maculated with dark purple blotches; the leaves are large, alternate, supradecompound, and when rubbed evolve an offensive odor of the urine of the cat.

Treatment. Evacuate the stomach by a scruple of sulphate of zinc, dissolved in an ounce of water, or by some other powerful emetic; the affusion of cold water on the head; and having reduced the cerebral excitement by bleeding and purging, administer freely vinegar and water, or any other acidulous liquid.

HENBANE, (***Hyoscyami folia et semina.***) A narcotic vegetable poison.

Symptoms. Sickness, stupor, dimness of sight, and delirium, followed by coma, and great dilatation of the pupils; the pulse is at first hard, but becomes gradually weaker and tremulous, petechiæ often make their appearance as the forerunners of death.

Morbid Appearances. Inflammation of the stomach, the intestines, and the membranes of the brain.

Test. None. The plant is recognized by its pale green, angular, viscid, or clammy leaves; its disagreeable odor; its flowers and seed vessels being on one side of the flowering spike with leaves on the other; its capsular fruit, furnished with a persistent calyx, bilocular, and opening with a lid.

Treatment. If the poison have been recently taken, evacuate the stomach by a powerful emetic, and afterwards administer vinegar and acidulous drinks; but if the poison have already entered the system, bleed and purge freely to reduce the inflammatory symptoms, exhibiting at the same time acidulous liquids.

HYDROCYANIC ACID; see *Prussic Acid.*

INSECTS, POISONOUS. The most common of these are the *Tarantula, Scorpion, Hornet, Wasp, Bee, Gnat, Gad Fly, Sand Fly, &c.* In general, the sting or bite of these insects occasions only a slight degree of pain and swelling; but occasionally the symptoms are more violent, and sickness fever, and occasionally death, result in consequence.

Treatment. Ammonia and oil may be rubbed on the affected part, and a piece of rag, moistened in the same, or in salt and water, may be applied till the pain is removed. Small doses of Spts. of Ammonia may also be given internally, with warm diluents, or wine and water. The sting may often be removed by making pressure over it with the barrel of a small watch key.

IODINE. An acrid mineral poison.

Symptoms. In doses of gr. x. to gr. xxx., iodine causes heat and constriction of the fauces, nausea, offensive eructations, epigastralgia, vain efforts at vomiting, colic, quickening of the pulse, diarrhœa, tremblings, great thirst, satyriasis, slight convulsions, death. When poisoning occurs from small doses long continued, emaciation and debility are extreme.

Morbid Appearances. Distension and inflammation of the stomach and intestines; sphacelation in some parts; pale, voluminous liver.

Tests. Iodine in the solid form is in bluish-grey scales, having the odor of chlorine, heated in a tube it affords violet vapor; added to cold mucilage of starch, it gives it a deep-blue color. If the poison be contained in animal fluids, pass through them a stream of sulphuretted hydrogen, then boil, saturate with potassa, and having added cold mucilage of starch, pour on the filtered solution some chlorine gas, the blue color will indicate the poison. The same process will detect it in the stomach.

Treatment. Administer mucilage of starch freely, then empty the stomach by direct emetics, and treat the inflammatory symptoms as a case of simple gastritis.

IODIDE OF POTASSIUM. (*Potassii Iodidum.*)

Symptoms. Uneasiness of stomach, followed by nausea and a burning pain in that organ; vomitings, cephalalgia, vertigo, tremors

Morbid Appearances. The stomach contracted; ecchymosed spots on its lining membrane; slight ulcerations; some traces of inflammation in the intestinal tube.

Tests. The crystals of the salts are cubes, of an acrid, sharp taste, slightly deliquescent; its solution, mixed with starch and treated with chlorine or with nitrous acid, forms the blue Iodine of Amidine; the bichloride of mercury forms a beautiful scarlet precipitate of the biniodide of mercury. Test the urine, after mixing it with starch, with gaseous chlorine. This gas will detect 1 part in 1,500,000 of urine, which should be cold before it is tested.

In Organic Liquids.—If much colored, boil with animal charcoal until the color is in great part or entirely removed; then add to the liquid a solution of starch in large quantity, and afterwards nitric acid. As a trial test, we may employ a slip of filtering paper soaked in starch. then dipped into the suspected liquid and exposed to the fumes of nitric acid. In this case the color of the liquid does not interfere with the experiment. By this process, the iodide may be detected in the urine, when the analyst may not succeed in finding it in the contents of the stomach. If present in organic solids, we must dry them, incinerate them and lixiviate the incinerated residue, when traces of the iodide may be detected by starch and nitric acid. The following is the result of an experiment. Ten grains of iodide of potassium were dissolved in six ounces of porter, mixed with an ounce of thick starch. The mixture was evaporated to dryness, the residue incinerated and lixiviated with one ounce of water. The solution was neutral. One drop containing one-fiftieth of a grain of iodide, gave a deep pink red color with starch and nitric acid.

Treatment. The same as in cases of poisoning by iodine.

IODIDES OF MERCURY, (*Hydrargyri Protiodidum et Biniodidum.*)

Symptoms. Nearly the same as those produced by bichloride of mercury.

Tests. When the protiodide is heated in a glass tube, it evolves vapor of iodine; if previously mixed with potassa, the heating sublimes metallic mercury, and leaves iodide of potassium. The biniodide sublimes yellow when heated, and changes to red as it cools: in other respects it may be tested in the same manner as the protiodide.

Treatment. The same as in cases of poisoning by corrosive sublimate.

LAUDANUM; see *Opium.*

LAUREL WATER, (*Aqua Distillata Cerassi Lauro-cerasi.*) A narcotic vegetable poison, deriving its poisonous powers from hydrocyanic acid.

Symptoms. Sudden death, without vomiting, convulsions, or any of the other symptoms which usually precede it in cases of poisoning. Insensibility when the death is not very sudden. In some instances violent pain of the stomach has been complained of immediately before the fatal event.

Morbid Appearances. Very slight appearances of redness in the stomach; but all the other organs are in a natural state.

Test. Strong smell of bitter almonds. The hydrocyanic acid which it contains is readily rendered obvious, which, added to its odor, enables the poison to be satisfactorily detected. See *Prussic Acid.*

Treatment. The fatal effect of this poison is so quickly produced that little opportunity is afforded for the trial of antidotes. Brandy, ammonia, and other cordials, may prove useful Chlorine has been proposed.

LEAD. The only compounds of lead which have been found produce poisonous effects upon the system, are the acetate subacetate, chloride, carbonate, and the oxide of the meta combined either with vegetable acids or fatty substances.

Sugar of Lead. (*Acetate of Lead.*)—This is more frequently taken as a poison than any other salt, although cases of acute poisoning by lead in any form are very uncommon. This substance is commonly seen in solid crystalline masses, white or of a brownish-white color; it much resembles loaf sugar in appearance, and has often been mistaken for it. It has also a sweet taste, which is succeeded by an astringent or metallic taste. It is very soluble in water. Four parts of water at 60° will dissolve one part; and it is much more soluble at a boiling temperature.

Symptoms. Acetate of lead is by no means an active poison. In medical practice, it has often been given in considerable doses without any serious effects resulting. When, however, the quantity taken has been from one to two ounces, then the following symptoms have been observed. A burning, pricking sensation in the throat, with dryness and thirst. Vomiting supervenes; there is uneasiness in the epigastrium, which is sometimes followed by violent colic. The abdomen is tense, and the parietes have been occasionally drawn in. The pain is relieved by pressure, and has intermissions. There is constipation of the bowels. The skin is cold, and there is great prostration of strength. When the case is protracted, the patient has been observed to suffer from cramps in the calves of the legs, pain in the insides of the thighs, numbness and sometimes paralysis of the extremities. The affection of the nervous system is otherwise indicated by giddiness, torpor, and even coma.

Morbid Appearances. We have not been able to find more than one case on record in which acetate of lead has proved fatal to man, and there is no account of the morbid appearances. In animals, according to Dr. Mitscherlich, when the dose is large, the mucous coat of the stomach is attacked and corroded; this change appears to be purely chemical, and takes place in all the organs of the body with which the salt of lead comes in contact. If given in a small dose, it is decomposed by the gastric secretions, and exerts no corrosive power on the mucous membrane. When the acetate of lead is given in a state of albuminate dissolved by acetic acid, death takes place with great rapidity; but on inspection, the stomach is not found to be corroded. This property belongs to the neutral salt, and is not manifested when the dose is small, or when the poison is combined with an acid.

Treatment. This consists in the free exhibition of solutions of the alkaline sulphates, either of soda or magnesia. The carbonates should be avoided, as the carbonate of lead is poisonous; while the sulphate is either inert or possesses but very little activity

An emetic of sulphate of zinc should be given, if vomiting does not already exist. The stomach-pump may be occasionally employed with benefit. It is well known that albumen precipitates the oxide of lead when added in large quantity; and Mitscherlich has found that casein, the albuminous principle of milk, is a very effectual precipitant of the oxide of lead. Therefore it would be advisable to administer, in cases of poisoning by the soluble salts of lead, milk or albumen in large quantity. The compounds thus formed, as in the case of corrosive sublimate, may not be absolutely inert; but they are far less active than the acetate itself and tend to prevent the action of the poison as a corrosive on the stomach.

Carbonate of Lead. (*White Lead. Ceruse.*) See *Carbonate of Lead*, pp. 235–6.

Oxides of Lead. The yellow oxide (massicot), and the brown oxide (peroxide), are but little known except to chemists. Litharge and minium are, however, much used in the arts, and have sometimes given rise to accidental poisoning. Liquids used for culinary or dietetic purposes, especially if they contain a free acid, are liable to become impregnated with oxide of lead, derived from the glaze of the vessel in which they are kept, and to form poisonous salts. If vinegar be used, acetate of lead may result. Litharge glaze is also easily dissolved by alkaline or fatty substances. The eating of dripping or fat of meat, baked in a newly glazed vessel, has thus been known to give rise to slight attacks of colic; while the symptoms were referred by the party to some substance mixed with the food. When articles of this kind are impregnated with oxide of lead, the fact is immediately known by their being turned more or less of a brown color by hydrosulphuret of ammonia. Litharge was formerly much used to remove the acidity of sour wine, and convey a sweet taste. Acetate of lead, or some other vegetable salt of the metal, is in these cases formed; and the use of such wine may be productive of alarming symptoms. Many years since a fatal epidemic colic prevailed in Paris owing to this cause. The adulteration was discovered by Fourcroy, and it was immediately suppressed. Such wine is known by its being blackened by hydrosulphuret of ammonia. Snuff has been found to be adulterated with red lead: in one instance this mixture is supposed to have caused death, and in another, it gave rise to alarming symptoms. (Med. Gaz., xxxii., 138.)

Cider is apt to become poisoned with the salts of lead when it comes in contact with that metal.

t has been found that sugar is sometimes the medium of conveying lead poison into the system, and giving rise to attacks of colic in those who partake of it. Dr. Jackson has reported an instance of this kind, in which several persons lost their lives, and many others were attacked with paralysis and colic, who had partaken of sugar which had probably been kept in leaden reservoirs. Lead was discovered in the sugar in large quantity.

Tests. Litharge is commonly seen in reddish or yellow-colored scaly crystals, insoluble in water, but soluble in great part, or if pure, entirely in dilute nitric acid. The solution possesses all the characters of nitrate of lead. Minium or red lead is commonly seen as a rich orange-red powder;—it is partially dissolved by acids,—a portion of brown peroxide being left

The solution gives the usual reactions with the tests for lead Both of these oxides are easily reduced on charcoal, by the aid of a blow-pipe, or by mixing them with paste,—painting with this mixture a piece of card, drying it and burning it, metallic lead is immediately produced. Minium is known from vermilion among other properties, by its being blackened by hydro-sulphuret of ammonia; from red oxide of mercury, by the action of nitric acid, as well as by the effect of heat. Red oxide of mercury is entirely dissipated into oxygen and mercury,—minium gives off oxygen, but remains fixed as an orange-yellow oxide of lead. It is a common coloring matter in red wafers.

LIME, (*Calx.*) A corrosive mineral poison.

Symptoms. Great heat of the throat, nausea, vomiting, epigastralgia, and insupportable colic, with all the symptoms which characterize inflammation of the stomach and intestines.

Morbid Appearances. Intense inflammation of all the membranes with which the poison has come in contact.

Test. If any of the poison be found, pour over it distilled water; then stop the vessel closely from the atmospherical air, and after some time filter the supernatant fluid. If this have a strong, acrid, styptic taste,—if it change to green the vegetable blues, and be precipitated by oxalic acid,—and if, on exposure to the air, a pellicle be formed which is soluble with effervescence in vinegar or any acid, we may pronounce the poison to be lime If none of the poison be found, and nevertheless it is suspected to be lime, calcine the contents of the stomach and bowels, and treat the residue as above directed.

Treatment. Vinegar, lemon juice, or any vegetable acid, should be freely administered, and then demulcents; employing bleeding, and every means that can reduce the inflammatory action excited in the abdominal viscera.

MEADOW SAFFRON, (*Colchici Autumnalis, semina et bulbus.*) An acro-narcotic vegetable poison, deriving its powers from colchicia.

Symptoms. Nausea and vomiting, violent griping and hypercatharsis, rapid sinking of the pulse, and cold sweats.

Morbid Appearances. Slight inflammation of the stomach and intestines; but the effect is chiefly produced by the action of the poison on the nervous system.

Test. None.

Treatment. Evacuate the stomach by bland demulcent fluid taken in large doses; then exhibit opium in small doses, with cordials.

MEAT, (*Poisoned.*) Cases of poisoning, from putrid or diseased meat, are of not unfrequent occurrence.

Symptoms. Pain and uneasiness at the præcordial region, extending to the back and loins; nausea and vomiting, thirst, and a burning sensation at the stomach, followed by great irritability of this organ: great prostration and debility, with death, or slow convalescence.

Morbid Appearances. A fluid state of the blood, which is dark colored; inflamed condition of the mucous membrane of the stomach and bowels.

Treatment. Evacuate the contents of the stomach by emetics, cathartics, and enemata; blisters to the epigastrium; stimulating frictions to the spine; cold applications to the head, local depletion or general venesection, in the early stage; afterwards cordial stimulants, and revulsives to the extremities. The morbid cause, in these cases, is generally a poisonous acid, generated by putrefactive fermentation, as in the German sausages, and smoked beef, imperfectly cured before smoking.

MONKSHOOD, (*Aconiti, folia, flores, et semina.*) An acro-narcotic poison.

Symptoms. Numbness of the apex of the tongue, with a sensation of burning in the fauces, followed by tremors, and a feeling of coldness in those parts. Nausea and violent vomiting, hypercatharsis, vertigo, cold sweats, delirium, and convulsions, which terminate in death.

Morbid Appearances. Very slight appearances of inflammation in the stomach; livid blotches appear on the body; the mind suffers; indeed, its effects appear to depend altogether on its action on the nervous system.

Test. None.

Treatment. Evacuate the substance from the stomach, and then administer freely acidulous fluids and cordials.

MORPHIA—ACETATE OF—HYDROCHLORATE OF, (*Morphiæ Acetas et Hydrochloras.*)

Symptoms. Morphia in poisonous doses causes nearly the same symptoms as opium; the acetate and hydrochlorate, in doses of three to six grains, cause headache, vertigo, dimness of sight, contraction of the pupils, vomiting, colic, diarrhœa succeeded by obstinate costiveness, retention of urine, great itching of the skin, sometimes accompanied with a papular eruption and profuse sweats, convulsions, sometimes of a tetanic, sometimes of an epileptic character. The acetate, in particular, causes tetanic twitching, resembling electric shocks. This is not a fatal symptom: but in these large doses the symptoms of this poison terminate in death.

Morbid Appearances. An injected state of the mucous membrane, and of the membranes of the brain, especially in the anterior part of the head.

Tests. Nitric acid tinges morphia and its salts red: to iodate of potassa, dissolved in water, add a drop of sulphuric acid, and then some starch, and when the mixture is cold, sprinkle the suspected morphia or its salt in it; if morphia be present, blue iodide of amidine will be formed. Iodic acid is said to discover morphia by the power which the latter has of decomposing it and setting the iodine free; but Mr. Davidson has discovered that albuminous fluids are equally capable of decomposing the iodic acid—thence it cannot be regarded as a test of morphia.

The three best tests for this alkaloid are the following. 1. Nitric acid. This, when added to a moderately strong solution of a salt of morphia, produces slowly a deep orange-red color. If added to the crystals, deutoxide of nitrogen is evolved;—the morphia becomes entirely dissolved, and the solution acquires instantly the deep-red color above described,—becoming, however lighter by standing. In order that the effect should follow, the solution of morphia must not be too much diluted, and the acid must be added in pretty large quantity. The color is rendered much lighter by boiling;—therefore the test should never be added to a hot solution 2. Permuriate of iron sesquichloride.) This, when neutralized by a small quantity of potash if necessary), gives an inky-blue color in a solution of morphia. If the quantity of the morphia be small the color is greenish:—the blue color is entirely destroyed by acids,—it is also destroyed by heat, but returns on cooling: thus this test should never be employed with a very acid or a hot solution of a salt of morphia. 3. Iodic acid. Morphia in the solid state or in solution decomposes this acid, taking part of its oxygen, and setting free iodine. In order to make this evident, the iodic acid should be first mixed with starch; and a part of this mixture only added to the suspected solution,—part being reserved to allow of a comparison. It is said that this test will detect the 1000th part of a grain of morphia:—if the quantity be very small, there is only a reddish or purple tinge, slowly produced, sometimes not for many hours;—if large, the dark-blue iodide of farina is formed in a few seconds. This color being destroyed by heat, the test must not be added to a hot solution. We have found also, that the presence of a large quantity of acid, prevents or interferes with the result. It succeeds equally well with morphia or its salts when unmixed with organic matter.

Treatment. The same as in poisoning by opium.

MURIATIC (HYDROCHLORIC) ACID, (*Acidum Hydrochloricum.*) A corrosive mineral poison.

Symptoms. Sensation of burning in the throat, the œsophagus, and the stomach; styptic taste in the mouth; great thirst; the eyes red and sparkling; the pulse very frequent and tense; the skin hot and dry; the tongue red and glazed; the lips black; vomiting of blood and yellow matter, having the pungent odor of the acid; cold sweats, delirium, and death. These are also the symptoms attending poisoning by any of the mineral acids; but it is said by *Orfila*, that when hydrochloric acid is the poison, a thick white fume of a sharp penetrating odor, similar to that exhaled by the acid, issues from the mouth.

Morbid Appearances. The mouth, œsophagus, and stomach, are of a deep-red color, and partially covered with extravasated blood; they are also often perforated in many places.

Test. When any of the acid which has been used as the poison remains, it is readily detected by its sensible qualities, and by the white dense fumes of hydrochlorate of ammonia, which are formed when a glass rod dipped in ammonia is approached to it. If mixed with wine, or other colored fluids, it may be detected by distilling the suspected fluid from a small retort over a candle, into a phial containing a solution of nitrate of silver; the chloride of silver will be thus formed, which is known by its solubility in ammonia, and its insolubility in nitric acid. If the contents of the stomach or the vomited matter only can be procured, boil these for three-quarters of an hour in combination with a dilute solution of pure potassa, and precipitate the filtered fluid with nitrate of silver, which will form the chloride of silver, if the poison be hydrochloric acid.

Treatment. Administer immediately soap and calcined magnesia, or whiting, mixed in bland demulcent fluids. Give, freely, emollient diluents, and employ antiphlogistic means to overcome the inflammatory symptoms that supervene, when the poison does not prove very soon fatal.

MURIATE or HYDROCHLORATE OF BARYTA, or CHLORIDE OF BARIUM, (*Barii Chloridum.*) A corrosive mineral poison.

Symptoms. Violent vomiting, accompanied with excruciating burning pains of the stomach and bowels: vertigo, stupor, paralysis of the lower extremities, convulsions, and death. Independent of its corrosive property, it acts on the brain and nervous system; the action of the heart is rapid and intermitting, respiration is momentarily suspended; the pupils dilate, and insensibility supervenes.

Morbid Appearances. Evidences of inflammation of the mucous membrane of the stomach throughout its whole extent.

Tests. If any of the poison be found, chloride of barium may be detected in it by dropping into it a little sulphuric acid, when a white precipitate will be formed, which is insoluble in nitric acid, or by the suspected fluid yielding with nitrate of silver a white curdled or clotted precipitate, insoluble in water and in nitric acid, but soluble in pure liquid ammonia. If the menstruum be red wine or coffee, the mixture is turbid; it should be filtered, and its color destroyed by chlorine before testing it. The excess of chlorine, however, must be previously dissipated by heat, when the nitrate of silver is employed as a test.

Treatment. As soon as possible, dilute largely with bland fluids holding in solution sulphate of soda or of magnesia; for these salts decompose the chloride of barium, and form an inert, insoluble sulphate in the stomach; then excite vomiting by irritating the fauces; afterwards treat the case as one of gastric inflammation.

⁂ The other barytic salts produce nearly the same effects on the animal economy as the chloride; and therefore these instructions refer equally to cases of poisoning by the *nitrate* and the *carbonate* of baryta, or by pure baryta.

MURIATE or CHLORIDE OF TIN, (*Chloras Stanni.*) A corrosive metallic poison.

Symptoms. An austere metallic taste; constriction of the œsophagus; impeded respiration; violent vomiting, with cramp of the stomach and excruciating colic pains, purging, the pulse small, but sharp and quick; convulsions, sometimes paralysis, asphyxia, and death.

Morbid Appearances. Inflammation and erosion of the stomach and intestines.

Test. This salt, in the solid state, is in small acicular crystals, of a yellowish-white color; deliquescent in the air, and reddening the vegetable blues. Mix the solid salt in a crucible with charcoal and caustic potassa (*potassa fusa*), and, covering the crucible with charcoal, expose it to a strong heat for twenty minutes. The result should be metallic tin and chloride of potassium. If the poison be in solution, precipitate [illegible] portions of it by the following re-agents: solution of [illegible] or of ferrocyanide of potassium, which throw [illegible] precipitates; and the hydrosulphurets, which [illegible] precipitates; bichloride of mercury, which forms a [illegible] pitate composed of grains of metallic mercury; a [illegible] silver, which precipitates clots of hydrochlorate [illegible] the solvents be wine or coffee, the solution must [illegible] solc by chlorine before being tested.

Treatment. Dilute copiously with milk, which appears to decompose the chloride; then excite vomiting by large draughts of tepid water and irritating the fauces. Bleed, and employ the warm bath, fomentations, and emollient enemas, to combat the inflammatory symptoms; administering, at the same time, opiates and antispasmodics to soothe the nervous irritation.

MUSSEL, THE (*Mytilis Edulis.*) A septic animal poison.

Symptoms. Sensation of weight at the stomach, nausea, constriction of the throat, immoderate thirst, vomiting, stertorous breathing, vertigo, itching, and sometimes an eruption all over the skin; low tremulous pulse, subsultus, and coldness of the extremities, occasionally terminating in death.

Morbid Appearances. Slight evidences of inflammation of the mucous membrane of the stomach. A dark, fetid fluid is present in the stomach; and the whole body rapidly undergoes putrefaction.

Test. None.

Treatment. Evacuate the stomach by a powerful emetic, and by irritating the fauces with the finger or a feather, until full vomiting be excited; purge with castor oil; and, at the same time, dilute freely with acidulous liquids, giving, at short intervals, from twenty to sixty drops of æther in half an ounce of simple syrup.

⁂ These remarks apply generally to all cases of poisoning by fish—of which the following are the most common: *Old Wife, Sea Lobster, Land Crab, Yellow-Billed Sprat, Grey Snapper, Dolphin, Conger Eel, Bottle Fish, Barracuda, Grooper, Rock Fish, King Fish, Bonetta, Porgee, Tunny, Blower.* It is probable that the poisonous properties of fish depend chiefly on an unhealthy state of the fish itself.

NITRATE OF COPPER; see under *Copper.*

NITRE—NITRATE OF POTASSA, (*Nitras Potassæ.*) An acrid mineral poison.

Symptoms. When taken in doses of half an ounce to an ounce, which has too frequently happened from the salt being sold by mistake for sulphate of soda, it excites nausea, vomiting, and hypercatharsis; bloody stools, excruciating tormina of the lower bowels, the sensation of fire in the stomach, laborious respiration, cold extremities, syncope, convulsions, and sometimes death. If the patient live, he may remain paralytic.

Morbid Appearances. Inflammation and sphacelation of the mucous membrane of the stomach, which has been occasionally found perforated. The evidences of inflammation extend throughout the intestinal canal.

Test. The form of its crystals, if any of the salt remain, instantly distinguishes nitre from sulphate of soda; but, if it be in powder, it may be known by deflagrating when it is thrown upon hot coals, and by giving out nitrous acid fumes when hot sulphuric acid is poured on it. If the acid be in solution, throw upon the surface some crystals of morphia, and pour into the fluid a little sulphuric acid; if nitre be present, the morphia will be [illegible] the nitrous acid disengaged. Or, add to the solu[illegible]e of iron and sulphuric acid; the nitric acid [illegible] the salt of iron will darken the color of th[illegible]

Treat[illegible] stomach, and dilute freely with milk and bland demulcents; exhibit emollient enemas; and, after bleeding, when the pulse is hard and quick, administer opium and aromatics.

NITRATE OF SILVER, or LUNAR CAUSTIC, (*Argenti Nitras.*) A corrosive metallic poison.

Symptoms. Nearly the same as those produced by corrosive sublimate; in general, the pain of the stomach is more severe; greatly embarrassed respiration.

Morbid Appearances. The organs of deglutition and the stomach present evident marks of inflammation and erosion. The mucous membrane of the stomach presents a black color; the lips, the interior of the mouth, the œsophagus, are also black. The fingers are sometimes tinged with the same color.

Tests. If the poison have been taken in solution in water, it is detected by the arsenious acid mixed with ammonia precipitating a yellow arsenite of silver. Ammonia does not render the solution turbid, but it is precipitated olive color by all the other alkalies. A stick of phosphorus placed in it precipitates the silver in a metallic state. All the hydrochlorates decompose it, and throw down a white precipitate, which is changed to black by the light; put these precipitates into a tube open at both ends and heated, pass through it a stream of hydrogen gas, the chloride first becomes yellow, then fuses and changes to red, which gradually weakens in depth, and leaves a coating of metallic silver on the tube.

Treatment. Administer, instantly, a strong solution of common salt, to form an insoluble chloride of silver in the stomach. Then evacuate the stomach by an emetic; and, if symptoms of inflammation nevertheless supervene, employ local and general bleeding, tepid baths, and emollient fomentations and clysters.

TRISNITRATE OF BISMUTH, (*Trisnitras Bismuthi.*) A corrosive metallic poison.

Symptoms. Nearly the same as those of corrosive sublimate, with a sensation of great heat in the chest and difficulty of breathing.

Morbid Appearances. Inflammation and erosion of the mucous membrane of the stomach, which is almost reduced to a state of pulp, and separated by the slightest friction. The inflammation extends throughout the intestines, and the lungs also display traces of it.

Tests. The best test is chromate of potassa, which precipitates it from its aqueous solution of a beautiful orange-yellow color. It may be detected in the solid contents of the stomach by calcination; in the fluid contents, by passing through them a stream of sulphuretted hydrogen gas, dissolving the precipitate in hydrochloric acid, filtering the solution, and testing with ferrocyanate of potassa, which forms a yellowish-white precipitate.

Treatment. Exhibit large draughts of milk, which is firmly coagulated into clots by the trisnitrate of bismuth, and involving the poison, affords time and opportunity to expel it from the stomach. If symptoms of inflammation show themselves combat them by bleeding and other antiphlogistic measures.

NITRIC ACID, NITROUS ACID—AQUAFORTIS, (*Acidum Nitricum, Nitrosum,* P. E.) Corrosive mineral poison

Symptoms Sensation of burning in the throat, œsophagus, and stomach; excessive vomiting, and almost immediate death, if the acid be strong, and the dose large; but if it be weak the patient may linger for a considerable time, in which case he vomits at intervals shreds of membrane, which have an insupportable odour; the constipation of the bowels is the most obstinate; and when dejections are obtained, they are attended with excruciating torture.

Morbid Appearances. When death has quickly taken place, the most characteristic feature displayed on dissection is a layer of yellow matter, which covers the mucous membrane of the œsophagus, the stomach, and every part over which the poison has passed. This membrane is also converted into a fatty substance, and the stomach is often found perforated. The lips, the chin, and the hands of the patient, are also stained with orange-colored spots.

Tests. Boil the fluid, if any remain unswallowed, over copper filings, when orange-colored fumes will be extricated if nitric acid be present. Add morphia, which will be reddened, or add carbonate of potassa, which will form a deflagrating salt, if the acid is the nitric. In a diluted state this acid blackens the solution of protosulphate of iron. When none of the poison remains, and death has taken place, saturate the contents of the stomach with bicarbonate of potassa; evaporate the filtered solution to dryness, add to the residue copper filings and sulphuric acid, and receive the fumes on morphia, or a solution of protosulphate of iron; redness in the former and dark olive in the latter prove the presence of nitric acid.

Treatment. Give large doses of a solution of soap, or a mixture of calcined magnesia, chalk, or whiting, in water or any bland fluid. Then evacuate the stomach by large draughts of demulcent fluids; and bleed, purge, and employ other antiphlogistic measures, if the symptoms indicate inflammation.

NUX VOMICA, (*Strychnos Nux Vomica, fructus.*) An acro-narcotic vegetable poison.

Symptoms. Sensations of inebriety; vertigo; tetanic twitchings, and rigidity of the limbs and arms, alternating with subsultus tendinum; extreme difficulty of respiration, with excruciating pain under the xiphoid cartilage; asphyxia; and death.

Morbid Appearances. Scarcely any evidences of membranous inflammation in the stomach or intestines; the lungs appear natural; but the left ventricle of the heart is generally gorged with blood, and the whole of the arteries contracted. It is supposed that this poison acts chiefly on the medulla spinalis

Tests. Various processes have been suggested for the detection of strychnia in nux vomica; but owing to the very small quantity of the poisonous alkaloid contained in it, it is obvious that, unless we have a large quantity of the powder to examine, none of these are likely to succeed. Fifty grains of the powder will not yield more than one-quarter of a grain of strychnia. The following is, perhaps, the most simple process: Boil the powder in alcohol of about seventy per cent., until nothing further is dissolved. Evaporate to an extract, and boil this in water with a small quantity of calcined magnesia. Strychnia, mixed with brucia, is thereby precipitated; and may be separated from the magnesia in the insoluble residue, by further digestion in boiling alcohol. This alcoholic liquid yields strychnia, which may be purified in the usual way. There are no chemical characters by which the acid, united to the strychnia, can be readily identified; and thus this process is more defective than that for morphia, since we acquire so much more certainty, where, besides the poisonous base, we can show by tests the presence of the peculiar acid with which the base is known to be united. Another method of separating strychnia, is by making an aqueous infusion with very dilute sulphuric acid, and afterwards precipitating the strychnia by boiling the filtered liquid with lime. The aqueous infusion of nux vomica gives the same bright-red tint with nitric acid, as the infusion of opium; but it is known from the latter by its giving a green instead of a deep red color with the permuriate of iron.

Treatment. Evacuate the stomach and bowels, and then dilute freely with vinegar and water, and other acidulous drinks, and give sedatives.

OPIUM, (*Opium.*) A narcotic vegetable poison.

Symptoms. Drowsiness and stupor, which are followed by delirium, pallid countenance, sighing, deep and stertorous breathing, cold sweats, coma, and death.

Morbid Appearances. Slight redness of the stomach and intestines; turgescence of the vessels of the brain, and effusion of water upon its surface and into the ventricles. Generally, the lungs are engorged, and the blood is fluid.

Tests. The tests for opium are, in fact, the tests of *morphia* and *meconic acid.* When morphia is present in such quantity that it can be obtained in crystals from its alcoholic solution, and accurately examined, there is no difficulty in identifying it; but this is rarely the case in poisoning by this drug. Christison gives a process for the detection of opium in mixed fluids and solids, which in the hands of a skilful chemist might be successfully employed; but ordinary practitioners could hardly avail themselves of it so as to give any decisive medico-legal evidence in a court of justice. Wash the contents of the stomach and intestines in distilled vinegar, and strain; then test a portion with acidulated persulphate of iron to detect meconic acid, which gives it a cherry-red color. To another portion add solution of acetate of lead, and separate the precipitate by filtration; wash it well, then extend it in water, and pass through it a stream of sulphuretted hydrogen, heat it to drive off any excess of the gas, and test the fluid with acidulated persulphate of iron. Evaporate the fluid separated by the filter to an extract, act upon this by alcohol, leave the tincture to spontaneous evaporation, and test the residue for morphia.

Treatment. The stomach-pump should be instantly used, or an emetic consisting of ʒ ss. of sulphate of zinc, or from gr. v. to gr. x. of sulphate of copper dissolved in an ounce of water should be exhibited as soon as possible, and the vomiting kept up by irritating the fauces. It is advisable to use an astringent infusion instead of water with the stomach-pump. After the stomach is emptied, if the whole of the narcotic be removed, give large draughts of coffee, brandy, and cordials; keeping awake and constantly rousing the attention of the sufferer, until the effects of the poison subside. Dash cold water upon the head in a constant stream; apply strong mustard cataplasms to the epigastrium and spine; and, if necessary, resort to artificial respiration. Sometimes cupping the temples is useful. Immersion in the tepid bath is a useful means of subduing the drowsiness. Dashing cold water on the head and chest is also useful in rousing the sensibility.

OXALIC ACID, (*Acidum Oxalicum.*) A corrosive poison.

Symptoms. Burning pain of the stomach; nausea, and severe but ineffectual efforts to vomit; great dilatation of pupils, vertigo, convulsions, and death.

Morbid Appearances. The tongue and fauces are covered with a viscid, white mucus; the stomach is partially inflamed, and exhibits in some places—those to which the acid has been more immediately applied—a pulpy character. Evidences of inflammation in the lungs.

Tests. Its small, needle-form, lamellar crystals have occasioned it to be mistaken for Epsom salts; but it is easily distinguished from these by its strong acid taste, by its volatilizing when heated in a phial, and subliming in small crystals, and by lime-water throwing down, in its solution, a copious precipitate of oxalate of lime, which is insoluble in an excess of the acid; but soluble in nitric acid. Precipitate by nitrate of silver; the precipitate, when well washed and dried, slightly detonates.

Treatment. It is recommended that water should be sparingly given, as it is apt to lead to the more extensive diffusion and absorption of the poison. But in some instances water has been found to be productive of great benefit; and has aided the efforts of the stomach to expel the poison by vomiting. The proper antidotes are chalk, or magnesia or its carbonate, made into a cream with water, and freely exhibited. These remedies appear, from the cases reported, to have been very efficacious when timely administered. A mixture of lime-water and oil might be advantageously employed. If much fluid has been swallowed, then the stomach-pump may be resorted to. The poison in many instances acts with such rapidity, as to render the application of these remedies, a hopeless measure. The exhibition of the alkalies,—potash, soda, or their carbonates, must in all cases be avoided; since the salts which they form with oxalic acid are as poisonous as the acid itself.

OXIDES OF COPPER; see under *Copper.*

OXIDES OF LEAD; see under *Lead.*

PHOSPHORUS, (*Phosphorus.*) A corrosive poison.

Symptoms. Phosphorus, taken even in moderate quantities, produces immediate death; and as it has been exhibited as a remedy, in this manner it may prove poisonous. The symptoms are violent pain of the stomach, with a hot alliaceous taste in the mouth: great excitement of the arterial system, and horrible convulsions, which are the forerunners of death.

Morbid Appearances. A general inflammatory aspect of the stomach and intestines, with sphacelated spots in various parts.

Test. Phosphorus is readily known by its alliaceous smell and combustible properties.

Treatment. Dilute largely so as to fill the stomach with liquid, by which the combustion of the phosphorus in it is impeded, and vomiting induced, without increasing the irritation of the viscus. Magnesia, mixed with the fluid exhibited, is useful, b neutralizing phosphoric acid, which is formed in these cases.

POTASSA,—SOLUTION OF POTASSA, (*Potassa fusa, Liquor Potassæ.*) Corrosive mineral poisons.

Symptoms. Acrid urinous taste in the mouth; great heat of the throat; nausea, and vomiting of bloody alkaline matter, acute epigastralgia and insupportable colic; hypercatharsis, convulsions, and death.

Morbid Appearances. Evidences of inflammation the most extensive of the whole alimentary canal, and perforations of the stomach.

Tests. If any of the poison remain, it is known by feeling soapy to the touch, changing to green the vegetable reds, restoring reddened blues, and precipitating nitrate of silver in the form of a dark-colored oxide, which is soluble in nitric acid Water impregnated with carbonic acid produces no precipitate, nor causes opacity, which distinguishes it from the caustic earths. Potassa is distinguished from soda by evaporating the solution in a silver spoon, and when it is concentrated, testing with hydrochlorate of platinum, or with tartaric acid: the former causes a yellow precipitate, the latter a precipitation of bitartrate of potassa. If none of the poison remain,, the vomited matter must be tested in the above manner.

Treatment. Vinegar and the vegetable acids should be instantly freely administered. Dilute with demulcents, and employ bleeding and other antiphlogistic means to reduce the inflammatory symptoms.

⁂ Cases of poisoning by soda and the alkaline carbonates require the same treatment.

POTASSII SULPHURETUM, (*Sulphuret of Potash.*)

Symptoms. Acrid taste, slight vomiting, faintness, convulsions, burning pain, constriction in the throat, gullet, and stomach purging, convulsions, stupor.

Treatment. Administer a solution of chloride of soda or chloride of lime: other measures to be adopted according to circumstances.

PRUSSIC ACID, (*Acidum Hydrocyanicum.*) A sedative poison.

Symptoms. When the dose is large, death is the immediate result; but if the dose do not exceed ten to twenty minims, it is succeeded by stupor and weight in the head; nausea, faintness, and vertigo, with loss of sight; followed by difficulty of respiration, dilated pupils, a small vibrating pulse, and syncope, which terminate insensibly in death, if no curative means be employed.

Morbid Appearances. No change of structure nor any trace of inflammatory action is evident; but a strong odor of the acid exhales from the stomach.

Tests. The odor; but the only certain test is to add to the liquid a few drops of liquor potassæ, and afterwards a solution of protosulphate of iron. If prussic acid be present, a precipitate of a burnt-brown color will fall, which, on adding a little sulphuric acid, instantly changes to a bluish-green, and gradually deepens to a beautiful full blue. If only the contents of the stomach be obtained, add some sulphuric acid, distil from a vapor, and test the product as above.

Treatment Administer as quickly as possible chlorine water, in doses of fʒij. in f℥j. of water; chlorine also, largely diluted with air, may be inhaled. Administer hot brandy and water, or camphor mixture, combined with liquid ammonia, or the aromatic spirit of ammonia. Oil of turpentine also, and the whole range of diffusible stimuli, will prove useful. *Chlorine*, however, is the most powerful antidote. It should be applied both internally and externally. If chlorine water be at hand this should be given in doses of one or two teaspoonfuls, properly diluted with water; or weak solutions of chloride of lime or chloride of soda may be administered. The patient may also inhale cautiously air impregnated with chlorine gas. *Cold affusion* and *artificial respiration* should never be omitted; this can easily be effected by making powerful pressure with both hands on the anterior surface of the chest, the diaphragm being at the same time pushed upward by an assistant. Bleeding may sometimes be necessary.

RATTLESNAKE POISON, (*Crotalus horridus*.)

Symptoms. Quick pulse, impeded respiration, sudden depression of strength in the wounded limb, extending over the whole body; convulsions; death. The wound becomes quickly gangrenous.

Treatment. A ligature above the bitten part; suction of the wound; the application of cupping-glasses; cauterization by hot irons or caustics. Administer internally eau de luce, ammonia, olive oil.

RUE, and OIL OF RUE. (*Rutæ Graveolentis folia et Oleum Volatile.*) Acro-narcotic vegetable poisons.

Symptoms. Great dryness of the mouth and throat, accompanied with a sensation of heat and pain of the stomach and bowels, headache, and delirium.

Morbid Appearances. We know of no recorded instance of death in the human species from the administration of rue or its oil; but in dogs, who have been killed by it, the stomach affords evidences of considerable inflammation.

Test. None; but the odor of the oil, which resembles that of the plant, leads to its detection.

Treatment. Emetics, and afterwards dilution with acidulous drinks and demulcents.

SABINE or SAVINE, and OIL OF SAVINE, (*Sabinæ folia et oleum.*) An acro-narcotic vegetable poison.

Symptoms. All those of high excitement, with very acute pain of the stomach and bowels, nausea, vomiting, hypercatharsis, and convulsions. Abortion in pregnant women.

Morbid Appearances. Inflammation of the mucous membrane of the stomach and rectum; but the symptoms depend chiefly on the action which the poison exerts on the nervous system

Test. None.

Treatment. Evacuate the stomach by copious dilution with mucilaginous fluids, and keep down the inflammatory symptoms by the use of the lancet and other antiphlogistic measures.

SAINT IGNATIUS'S BEAN, (*Strychnos Sancti Ignatii.*) An acro-narcotic poison.

Symptoms; see *Strychnia.*

Tests. This seed is about the size of a small olive, convex on one side and angular on the other, and covered with a grey, powder; the substance horny, hard, brown, inodorous, and very bitter to the taste.

Treatment; see Strychnia.

SALIVA OF THE RABID DOG.

Symptoms. These occur at a very uncertain interval after the bite, generally between the twentieth day and three or four months, sometimes not till after several years. The first symptoms are usually a sense of pain and uneasiness in the seat of the wound, which assumes a red and inflamed appearance—anxiety, languor, restlessness, spasms, horror, disturbed sleep, difficult respiration, and shuddering at the slightest breath of air, succeed, and are soon increased. Violent convulsions affect, at times, the whole body, distorting the muscles of the face. The eyes are red and protruded, the tongue swells, and sometimes hangs out of the mouth, while there is a copious secretion of viscid saliva; there is pain in the stomach, vomiting often, of bilious fluids; difficulty, or often inability of swallowing, and a sense of horror whenever liquids are seen; glassy appearance of the eyes; death.

Treatment. The bitten part should be immediately cut out, and a running sore made by caustic repeatedly applied. Even after the wound has healed, the parts should be removed by the knife, and caustic applied, making an ulcer, which should be allowed to heal by granulation. Suction by the mouth should never be neglected, and bleeding should be promoted by the application of warm water. The wound should be covered for some days with a warm poultice. If convenient, exhausted cups should be applied. After hydrophobia has supervened, no treatment will probably succeed.

SERPENTS, POISONOUS. Of these, the most common are the *Viper*, *Black Viper*, *Rattlesnake*, and the *Adder*.

Symptoms. A sharp pain in the wounded part, which soon extends over the body; great swelling, at first hard and pale, then reddish-livid, and gangrenous in appearance; faintings vomitings, and convulsions, sometimes jaundice; pulse small, frequent, and irregular, breathing difficult, cold sweats, sight fails, faculties of the mind deranged, extensive suppuration, gangrene, and death.

Treatment. A moderately tight ligature to be applied above the bites, draw out the poison by suction immediately, and afterwards promote the bleeding of the wound by the application of warm water; next apply lunar caustic, or the actual cautery, and cover the wound with pledgets of lint dipped in equal parts of olive oil and aqua ammoniæ. Administer ammonia internally, with warm, diluting drinks, wine, &c., covering the patient warmly in bed. If gangrene be threatened, bark, arsenic, &c., are recommended. It is highly probable that chlorine would be a good remedy, both taken by the mouth and inhaled.

SOW BREAD, (*Cyclamen Europeum.*) An acrid vegetable poison.

Symptoms. Violent tormina and purging; bloody stools, accompanied with cold sweats and convulsions, frequentl
in death.

Test None.

Morbid Appearances. Inflammation of the mucous membrane of the stomach and bowels.

Treatment. Induce vomiting by large draughts of demulcent fluids, and combat the secondary symptoms by antiphlogistic or other means, as may be required.

PURGE—EUPHORBIUM, (*Euphorbiarum succus proprius, et fructus.*) Acrid vegetable poisons.

Symptoms. A burning sensation in the mouth, throat, and stomach; vomiting, hypercatharsis, producing bloody stools, convulsions, and death.

Test. The euphorbium of the shops is readily recognized by the irregular triangular form of its tears, and their enclosed seeds. When boiled in alcohol, the greater part is taken up, but an insipid wax separates as the solution cools, whilst a hot acrid oil remains in solution.

Morbid Appearances. Evidences of violent inflammation of the stomach and the bowels; but more particularly of the rectum, which is always ulcerated, the surface of the abraded spots being covered with a brown or blackish fluid, which is probably extravasated blood.

Treatment. Excite vomiting by large draughts of tepid water, and then exhibit, alternately and repeatedly, a few tablespoonfuls of olive oil, and a cupful of milk. Soothe the rectum with mutton broth and starch clysters, and bleed, if the excitement run high, after the stomach and bowels are evacuated.

STRAMONIUM, or THORN APPLE, (*Daturæ Stramonii herba, fructus et semina.*) A narcotic vegetable poison, deriving its power from an alkaloid, named *Daturia.*

Symptoms. Vomiting, vertigo, delirium, sometimes furious madness, stupor, convulsions, paralysis, cold sweats, and death.

Test. None.

Morbid Appearances. Evidences of inflammation in the mucous membrane of the stomach and the meninges of the brain. The lungs are generally gorged with a very dark-colored blood, and blotches of extravasated blood are seen in various parts of the alimentary canal.

Treatment. The same as in cases of poisoning by opium.

STRONG-SCENTED LETTUCE, (*Lactucæ Virosæ herba.*) A narcotic vegetable poison.

Symptoms. Inebriety, followed by the other symptoms that characterize poisoning by opium.

Test. None.

Morbid Appearances and *Treatment.* The same as in cases of poisoning by opium.

SUGAR OF LEAD; see under *Lead.*

SULPHATE OF COPPER; see under *Copper.*

SULPHATE OF ZINC; see *White Vitriol.*

SULPHURIC ACID, (*Acidum Sulphuricum.*) A corrosive mineral poison.

Symptoms. Austere styptic taste in the mouth; a sensation of burning pain in the throat, gullet, and stomach; nausea, vomiting, and [illegible] of the breath. The matter vomited is tinged [illegible] by venous blood, and air-bubbles form [illegible] either upon chalk or upon marble. Sym[illegible]mation of the abd[illegible] viscera soon [illegible] respiration, and [illegible] bling croup; a frequent, small, concentrated, irregular pulse; constant horripilatio; extreme anxiety and restlessness; convulsions of the face and lips, and sometimes a papulous eruption precedes death. The intellect remains entire until the last

Morbid Appearances. The stomach contains a large quantity of dark grumous matter, and is much distended with fetid gas, its coats are ulcerated, black, and covered with deep corroded spots, an appearance that extends almost through the whole of the alimentary canal, which, in many places, also, is as it were dissolved, and in many instances perforations take place, and the contents of the stomach are found in the abdominal sac. The mouth and œsophagus present evidences of the highly corrosive properties of the poison.

Test. If any of the poison remain, it can be readily recognized by its saponaceous feeling when rubbed between the fingers; its great specific weight, its property of evolving heat when mixed with water, and by its decomposition and the evolution of sulphurous acid gas on boiling it over mercury. If it be combined with wine or with vinegar, add a solution of nitrate of baryta; if the acid be present, a sulphate of baryta, insoluble in nitric acid, will be formed; the existence of which, however, must be demonstrated by adding to it an equal weight of charcoal exposing the mixture, wrapped up in platinum foil, to the heat of a spirit lamp for ten minutes, then introducing it into a glass tube, and adding a few drops of pure hydrochloric acid. Sulphuretted hydrogen gas is evolved, and easily recognized both by the odor of the vapor, and by introducing into the tube a slip of paper rubbed over with carbonate of lead. The contents of the stomach may be tested by boiling them with metallic mercury, which will produce sulphurous acid gas, if sulphuric acid have been the poison.

Treatment. Having ascertained the nature of the poison, dilute instantly and largely with milk mixed with calcined magnesia, chalk, or whiting, or with soap, or the fixed alkalies, and in the absence of these, soap-suds, infusions of wood-ashes, weak solutions of the alkaline carbonates, white of eggs, milk, oil, or any mild diluent; and treat the secondary symptoms by the means usually employed in inflammation of the intestines.

TARTARIC ACID, (*Acidum Tartaricum.*) A corrosive poison.

Symptoms. Nearly the same as those from poisoning by oxalic acid, but less severe.

Morbid Appearances. Very similar to those produced by oxalic acid.

Tests. When heated in a phial, instead of subliming like oxalic acid, it is decomposed, blackens, swells, smokes, and exhales an acrid vapor. It burns with a blue flame, and leaves a spongy charcoal. When its solution is treated with lime-water, the white precipitate is soluble in an excess of the acid: with potash, the precipitated crystals are bitartrate of potassa.

Treatment. Solutions of the alkalies, or chalk and water, should be instantly administered, and the secondary symptoms treated by bleeding and other antiphlogistic measures.

TARTAR EMETIC,—POTASSIO-TARTRATE OF ANTIMONY, (*Antimonium Tartarizatum, Antimonii Potassio-Tartras.*) A corrosive metallic poison.

Symptoms. Nausea and severe vomiting, hiccough, cardialgia a sensation of burning heat at the epigastrium; twisting colic and hypercatharsis; small, frequent, hard pulse; syncope, difficult respiration, vertigo, insensibility to external stimulants, most painful cramps in the lower limbs, great prostration of strength, and death.

Morbid Appearances. The stomach and intestines much inflated with gas; and the mucous membrane of the stomach and intestines red, tumefied, and covered with a viscid layer easily separated; the peritoneum is generally of a dark brick-red hue; and the membranes of the brain display marks of having been the seat of great inflammatory excitement; the lungs are not altered.

Tests. If the poison be found in its solid form, add charcoal, and reduce it by heating it in a coated tube. The odor of burnt vegetable matter will be exhaled; the powder will first blacken, and then resume its white color, and finally display metallic antimony. If the poison be found in a state of solution:—1. Pour into the fluid a few drops of alcoholic infusion of galls, which will produce an instantaneous, copious, clotted, whitish-yellow precipitate. 2. Pass through the solution a stream of sulphuretted hydrogen gas; collect and wash the orange-colored precipitate, put it in a glass tube open at both ends, and fitted to a proper apparatus for passing over the sulphuret of antimony a stream of hydrogen gas, whilst the tube is heated by a spirit lamp. The sulphuret is thus reduced, the sulphur carried off, and metallic antimony procured. If the poison be a vinous solution of tartar emetic, the precipitate formed by the tincture of galls is a bright violet.

Treatment. Dilute freely with tepid infusion of galls to decompose the poison and form an insoluble tannate, and evacuate by the stomach-pump; but if the whole of the poison be not evacuated, large doses of the decoction of yellow cinchona bark should be administered. It would perhaps be well to give this decoction, in the first instance, in doses sufficient to excite vomiting by their bulk. Opium is highly useful in checking the excessive evacuations. Venesection and the warm bath are very necessary in the treatment of the supervening gastro-enteritis.

TOBACCO, (*Nicotiana Tabaci folia.*) A narcotic vegetable poison, deriving its power from an alkali named *Nicotina*, and a volatile oil.

Symptoms. Severe nausea, vomiting, headache, and other sensations of inebriety; sudden sinking of the strength, cold sweats, tremors, convulsions, and death. It operates most powerfully when introduced into the anus; the external application of a strong infusion is attended with similar symptoms, and proves nearly as virulent.

Morbid Appearances. The mucous membrane of the stomach presents very slight traces of inflammation, but no alteration is perceptible in the intestines. The lungs are generally found gorged with blood; but the morbid appearances are altogether obscure; the poison producing its deleterious effect evidently by its action both on the heart, which it paralyzes, and on the nervous system.

Treatment. If the practitioner be called immediately after the poison has been swallowed, evacuate the stomach by the or [illegible] grains of tartar emetic; assist its action by irritating the fauces, and encourage the vomiting by very copious draughts of astringent infusions, and full doses of tincture of yellow cinchona bark or of tincture of galls. If, however, some time have elapsed, administer ammonia, then castor oil and purgatives, and immediately afterwards lemon juice, or vinegar and water; but if the sedative effects be already produced, nothing can be done until the habit be roused by brandy, camphor, and cordials.

VERATRUM; see *Hellebore Root—White.*

VERATRIA. An acro-narcotic poison.

Symptoms. In even small doses it excites nausea, vomitings, hypercatharsis, embarrassed respiration and tetanic spasms, which generally terminate in death.

Morbid Appearances. Indications of severe inflammation of the mucous membrane, ulcerations of the stomach and duodenum

Tests. A white, inodorous, uncrystallizable powder, which excites violent sneezing when applied to the nostrils; it is scarcely soluble in water, very soluble in alcohol and æther; sulphuric acid first colors it yellow, then red, and lastly violet.

Treatment. Copious dilution with demulcents, bleeding, and other antiphlogistic means.

VERDIGRIS, (*Ærugo, Subacetas Cupri.*) See under *Copper.*

VIPER POISON.

Symptoms. Same as those given under *Serpent Poisoning*, viz., lancinating pain in the bitten part, increased on pressure, and extending to the whole limb: the part swells, is at first pale, then red, livid, gangrenous, and excessively hard. Vomiting, convulsions, jaundice, pulse small frequent, concentrated; irregular, embarrassed breathing, cold sweats, delirium.

Treatment. Apply a ligature above the wounded part; cauterize the wound with a hot iron or any active caustic: administer eau de luce, ammonia, olive oil.

WHITE LEAD; see under *Carbonate of Lead.*

WHITE VITRIOL, (*Sulphas Zinci.*) A corrosive metallic poison.

Symptoms. An acerb taste in the mouth, with a sensation of choking; nausea and severe vomiting, frequent stools, pains of the epigastrium and lower belly, difficult respiration, quickened pulse, paleness and shrinking of the features, and coldness of the extremities. Death but rarely follows, owing to the vomiting excited in the first instance by the poison.

Morbid Appearances. Evidences of intense inflammation of the mucous membrane of the stomach and bowels, and occasionally patches of black extravasated blood on the muscular coats of these viscera.

Test. Chromate of potassa, which throws down in the solution an orange-yellow chromate of zinc.

Treatment. Let the patient drink freely of milk, which, besides acting as an emollient, partially decomposes the poison, rendering it more inert. Exhibit emollient clysters, if the poison be not ejected from the stomach, and have passed the pylorus, and treat the secondary symptoms by antiphlogistic measures

WOLFBANE; see *Monkshood.*

Method of distinguishing the following vegetable Alkaloids:—Brucia, Delphia, Emetia, Morphia, Solania, Strychnia, Veratria—when they are in powder.

Treat the powder first with nitric acid, which is colored red by *Brucia, Delphia, Morphia*, and the *Strychnia* of commerce, but not by pure strychnia. If the reddened acid become of a violet hue on the addition of protochloride of tin, after the nitric solution has cooled, the alkaline powder is *Brucia:* if the reddened acid gradually become black and carbonaceous, it is *Delphia*. If the powder be soluble without decomposition, and decompose iodic acid, evolving free iodine, it is *Morphia:* if it is not fusible, and does not decompose iodic acid, it is *Strychnia*. If the powder greens, instead of reddening, nitric acid, it is *Solania:* if it is insoluble in æther, and does not redden nitric acid, it is *Emetia:* if it be soluble in æther, and does not redden nitric acid, but melts when heated and volatilizes, it is *Atropia:* if it is thus affected by æther and nitric acid, but is not volatilized, it is *Veratria*.

9. *Carbonate of Lime Calculus.*—It dissolves with effervescence in dilute acids, affording a solution which is precipitated by oxalate of ammonia.

10. *Calculi containing Silica* leave, after calcination, before the blowpipe, an infusible ash (principally silica), which dissolves in a melted lead of carbonate of soda with effervescence, producing a vitreous pearl, more or less limpid.

APPENDIX.

NO. III.

ART OF PRESCRIBING MEDICINES.

In prescribing a medicine, the following circumstances should always be kept in view:—Age, Sex, Temperament, Habit, Climate, the Condition of the Stomach, and Idiosyncrasy.

Age.

For an adult, suppose the dose to be one, or		1	drachm
Under 1 year, will require only	1-12th,	5	grains.
2 years, " " "	1-8th,	7½	grains.
3 " " " "	1-6th,	10	grains.
4 " " " "	1-4th,	15	grains.
7 " " " "	1-3d,	1	scruple.
14 " " " "	½	0½	drachm.
20 " " " "	2-3ds,	2	scruples.
Abo. 21 " the full dose . . .	one,	1	drachm.
65 " the inverse gradation of the above.			

Opiates affect children more powerfully than adults; but children bear larger doses of calomel than adults.

Sex. Women require smaller doses than men; they are more rapidly affected by purgatives than men; and the condition of the uterine system must never be overlooked.

Temperament. Stimulants and purgatives more readily affect the sanguine than the phlegmatic, and consequently the former require smaller doses.

Habits. The knowledge of habits is essential; for persons in the habitual use of stimulants and narcotics require larger doses to affect them when laboring under disease, while those who have habituated themselves to the use of saline purgatives are more easily affected by these remedies. Persons, however, who have habituated themselves to the use of opium do not require larger doses than usual of other narcotics.

Climate. Medicines act differently on the same individual in summer and in winter, and in different climates. Narcotics act more powerfully in hot than in cold climates; thence smaller doses are required in the former: but the reverse is the case with respect to calomel.

Condition of the Stomach and Idiosyncrasy. The least active remedies operate very violently on some individuals, owing to a peculiarity of stomach, or rather disposition of body, unconnected with temperament. This state can be discovered only by accident or time; but when it is known, it should always be attended to by the practitioner

In prescribing, the practitioner should always so regulate the intervals between the doses, that the next dose may be taken before the effect produced by the first is altogether effaced; for by not attending to this circumstance the cure is always commencing but never proceeding. It should, however, also be kept in mind, that some medicines, such as the mercurial salts, arsenic, &c., are apt to accumulate in the system; and danger may thence arise if the doses too rapidly succeed one another. The action also of some remedies, elaterium and digitalis for example, continues long after the remedy is left off; and therefore much caution is requisite in avoiding too powerful an effect, by a repetition of them even in diminished doses. Aloes and castor oil acquire greater activity by continued use, so that the dose requires to be diminished.

PRESCRIPTIONS

EXAMPLES OF THE MOST USEFUL FORMS OF EXTEMPORANEOUS PRESCRIPTIONS. (THE DOSES ARE FOR ADULTS.)

POWDERS.

NARCOTIC.

℞ Pulveris conii gr. v.,
——— glycyrrhizæ gr. vi.
Sit pulvis, ter quotidie sumendus.
scirrhous affections, scrofula, painful old ulcers, &c

℞ Pulveris belladonnæ gr. i.,
——— potassæ nitratis gr. xxi.,
——— sacchari gr. ix.,
Fiat pulvis, hora somni quotidie sumendus.
In chronic rheumatism, extensive ulcerations, mania, and epilepsy.

℞ Pulveris rad. belladonnæ gr. vj.,
——— ipecacuanhæ gr. vj.,
——— rad. glycyrrh.,
——— sacch. albi, ā ā, ʒ ss.,
Sulphuris præcipit. ℈ ij.,
Olei anisi,
Olei succini, ā ā, min. iij.
M. ft. pulv. v. ad xx.

℞ Pulveris fol. belladonnæ gr. j. to gr. iij.,
Moschi,
Camphoræ, ā ā, gr. v.,
Sacchari albi ʒ ss.
Tere bene, et div. in chart. viii.

ANTISPASMODIC.

℞ Pulveris valerianæ gr. xx.
——— cinnamomi comp. gr. x.
Fiat pulvis, ter quaterve quotidie sumendus.
In hysteria, hemicrania, chlorosis.

℞ Pulveris ipecacuanhæ gr. i.,
——— sodæ carbonatis gr. xii.,
——— opii gr. i.
Fiat pulvis, octava quaque hora sumendus.
Spasmodic asthma, hooping-cough.

℞ Zinci oxydi gr. iij.,
Sacchari albi gr. v.
Sit pulvis, quarta quaque hora sumendus.
In gastric or spasmodic cough.

TONIC.

℞ Pulveris cinchonæ ʒ ss.,
——— cinnamomi comp. gr. x.
Sit pulvis in cyatho lactis, tertia quaque hora sumendus
In convalescence from fevers.

℞ Ferri potassio-tartratis gr. viii.,
Pulveris calumbæ ℈ i.,
Fiat pulvis, quarta quaque hora sumendus.
After diarrhœa, in scrofulous tumors and dyspepsia.

℞ Pulveris calombæ,
——— subcarbonatis ferri,
——— rhei,
——— zingiberis, ā ā, ʒ j.
M. ft. pulv. No. xi., unus quaque quarta hora sumendus.

℞ Tartratis ferri ℈ ij.,
Pulveris calombæ ʒ j.
Ft. pulv. No. iv., unus quarta quaque hora.

ANTIPERIODIC.

℞ Quinæ disulphatis gr. iij.,
Sacchari albi gr. v.
Sit pulvis secunda quaque hora, absente paroxysmo, sum.
In the intermissions in ague.

℞ Prussiatis ferri,
Pulveris guaiaci, ā ā, ʒ j.
M. ft. pulv. No. xij., unus ter quotidie sumendus.

ASTRINGENT

℞ Pulveris catechu gr. xv.,
——— gallæ gr. ij.
Sit pulvis, post dejectiones singulas liquidas sumendus.
In diarrhœa, from a weakened state of the bowels.

℞ Pulveris kino compositi gr. xv.
Pulvis ex cyatho aquæ menthæ viridis sexta quaque hora sumatur.
In chronic diarrhœa and intestinal hæmorrhages.

℞ Sulphatis aluminæ et potassæ ʒ ss.,
Pulveris opii gr. iij.
Ft. pulv. No. vj. una quaque quarta hora.

℞ Sulphatis aluminæ et potassæ gr. xx.
Pulveris kino gr. v.
M. ft. pulv. No. v.

EMETIC.

℞ Pulveris ipecacuanhæ gr. xx.
Antimonii potassio-tartratis gr. i.
Fiat pulvis emeticus.

℞ Pulveris ipecacuanhæ,
——— rhei, ā ā, gr. xx.
M.

℞ Sulphatis cupri gr. ij. vel x.,
in cases of poisoning;

℞ Sulphatis zinci gr. x. vel ʒ ss.

CATHARTIC.

℞ Jalapæ pulveris gr. xij.,
Calomelanos gr. iij.,
Sulphatis potassæ gr. vij.
Fiat pulvis, hora somni, pro re nata, sumendus.

A useful purgative in diminishing action of the liver

℞ Calomelanos gr. iii.,
Pulveris jalapæ,
Sacchari, sing. gr. x.
Sit pulvis, vespere vel primo mane sumendus.

In bilious fevers, and slimy and obstructed bowels.

℞ Calomelanos gr. iii.,
Pulveris scammonii compositi gr. xii.
Sit pulvis quamprimum sumendus.

In worm cases.

℞ Hydrargyri chloridi,
Pulveris cambogiæ,
——— jalapæ,
——— rhei,
——— cinnamomi, ā ā, ʒ ij.
M. Dosis, a gr. v. ad gr. xx.

DIURETIC.

℞ Bitartratis potassæ ʒ ss.,
Pulveris scillæ siccatæ gr. ii.,
——— zingiberis gr. iv.
Sit pulvis, octava quaque hora sumendus.

In ascites.

℞ Potassæ bitartratis ʒ jss.,
Pulveris scillæ exsiccatæ gr. ij.
——— digitalis gr. j.,
——— zingiberis gr. v.
Ft. pulv. pro dos. Octava quaque hora sumendus.

℞ Pulveris uvæ ursi ʒ jss.,
Sodæ subcarbonatis ʒ j.
M. Div. in chart. No. xii. Una ter die sumendus.

In nephritic complaints

DIAPHORETIC.

℞ Pulveris ipecacuanhæ comp. gr. v.,
——— tragacanthæ comp. gr. x.
Sit pulvis, quarta vel sexta quaque hora sumendus.

In the commencement of febrile diseases, after emptying the stomach and bowels.

℞ Antimonii potassio-tartratis ℈j.,
Sacchari albi gr. xxx.
Intime misceantur, et divide in doses æquales decem, quarum sumatur una tertia quaque hora.

In fever, after bleeding and the exhibition of a clyster.

℞ Pulveris nitratis potassæ ʒj.,
Tartratis antimonii gr. j.,
Calomelanos gr. vj.
M. ft. pulv. vj., one every two hours.

In febrile affections.

℞ Pulveris opii gr. iij.,
——— ipecacuanhæ gr. vj.,
Calomelanos gr. jss.,
Nitratis potassæ ʒss.
M. ft. pulv. vj. Unus, quaque quarta hora.

℞ Pulveris guaiaci,
——— nitratis potassæ, ā ā, ʒj.,
——— ipecacuanhæ gr. iij.,
——— gummi opii gr. ij.
M. ft. pulv. vj., quaque tertia hora.

A stimulating diaphoretic.

EXPECTORANT.

℞ Pulveris ipecacuanhæ gr vi.,
——— potassæ nitratis ℈iss.,
——— myrrhæ gr. xii.
Misce, et distribue in doses æquales quatuor, quarum sumatur una quartis horis.

In asthma, and the earlier stage of phthisis pulmonalis.

℞ Nitratis potassæ ℥j.,
Calomelanos gr. vj.,
Pulveris opii gr. iij.,
——— ipecacuanhæ gr vj.
M Div. in chart. No. vj., unus quaque tertia hora.

PILLS.

NARCOTIC.

℞ Opii gr. i.
Fiat pilula, hora somni sumenda

To procure sleep in ordinary cases.

℞ Pulveris digitalis gr. iv,
Camphoræ gr. xii.,
Extracti hyoscyami gr. xviii.
Fiant pilulæ sex. Sumantur ij. hora somni quotidie.

In maniacal and spasmodic affections.

℞ Morphiæ acetatis gr. j.,
Pulveris digitalis gr. vj.,
Camphoræ rasæ gr. x.,
Pulveris acaciæ gr. viij.,
Syrup. tolu. q. s.
Ft. massa. Div. in pil. vj., quarum capiat unam tertiis horis.

SEDATIVE.

℞ Plumbi acetatis gr. xxx.,
Pulveris colchici gr. xx.,
——— opii gr. iii.,
Mucilaginis acaciæ q. s.
Misce optime, et divide in pilulas æquales decem, quarum sumat unam sexta quaque hora.

In active hæmorrhages, washed down with ʒj. of distilled vinegar in f℥j. of water. They may also be given in phthisis, one pill twice a day, after bleeding.

℞ Extr. opii gr. j.,
Nitratis potassæ gr. vj.,
Camphoræ rasæ gr. v.,
Syrupi papaveris q. s.
Ft. pil. No. iij. pro dose.

℞ Camphoræ subactæ ℈j.,
Potassæ nitratis ʒss.,
Ext. hyoscyami,
Ext. anthemidis, ā ā, ℈ij.,
Syrupi papaveris q. s.
M. ft. pil. No. xxxv. One every four or six hours.

ANTISPASMODIC.

℞ Opii gr. ss.,
Castorei gr. viss.,
Pulveris digitalis gr. i.,
Syrupi q. s.
Fiant pilulæ duæ, bis vel ter die sumendæ.

In spasmodic asthma, and dyspnœa.

℞ Cupri ammonio-sulphatis gr. ii.,
Micæ panis q. s.
Fiant pilulæ quatuor. Sumatur una bis quotidie.

In epilepsy, gradually increasing the dose.

℞ Argenti nitratis gr. ij.,
Micæ panis q. s.
Fiant pilulæ æquales quatuor. Sumatur una sexta quaque hora.

In chorea, and other spasmodic affections.

⁂ These pills should be washed down with 8 minims of diluted nitric acid in f℥ss. of water, in order to prevent the blue color of the skin which the nitrate is apt to cause.

℞ Gum. ammoniaci ʒj.,
Benzoini,
Pulv. myrrhæ ā ā, ℈ij.,
Assafœtidæ ʒss.,

Camphoræ ℈j.,
Tinct. opii gt. xii.
M. Div. in pil. ix. Duo vel tres, quaque tertia hora

℞ Camphoræ,
Potassæ nitratis,
Pulv. digitalis purpur., ā ā, ʒ ss.,
Pulv. cinchon. flav. ʒ ss.
Ext. gentian. ʒ ij.,
Syrup. simpl. q. s.
M. ft. pil. lxx.

STIMULANT.

℞ Assafœtidæ ʒ iss.,
Pulveris zingiberis ʒ ss.
Syrupi q. s.
Ut fiant pilulæ triginta, quarum sumat tres tertia quaque hora.
palsy.

℞ Pulveris capsici [illegible],
Micæ panis,
Aquæ distillatæ, ā ā, q. s.
Ft. pil. x. Unus quaque quarta hora.

℞ Pulveris guaiaci ʒ j.,
Terebinthinæ venetæ q. s.
Ft. pil. No. xv. Ter die sumendus
gleet and leucorrhœa.

℞ Carbonatis ammoniæ,
Capsici,
Caryophylli,
Macis, ā ā, ℈j.,
Olei carui gt. v.,
Ext. gentianæ gr. xii.,
Syrupi simplicis q. s.
Ft. pil. xx.
se every two hours, in gout of the stomach.

℞ Strychniæ gr. j.,
Acidi acetici ♏j.,
Micæ panis ℈j.
Fiant pilulæ æquales decem. Sumatur una sexta quaque hora.
paralysis from poisoning by carbonate of lead.

TONIC.

℞ Pulveris rhei,
——— zingiberis, ā ā, ʒ ss.,
Extracti anthemidis ʒ i.
Fiat massa, in pilulas æquales triginta dividenda, quarum capiat tres ante prandium quotidie.
In dyspepsia and chlorosis.

℞ Ferri sesquioxydi,
Extracti conii, ā ā, ʒ i.
Distribue in pilulas æquales viginti-quatuor. Sumantur duæ bis quotidie.
In fluor albus and scrofula.

℞ Acidi arseniosi gr. ij.,
Opii in pulverem triti gr. viij.,
Saponis ℈j.
Fiat massa, in pilulas xxiv. æquales dividenda, quarum sumat unam ter quotidie.

In intermittents, periodical headache, neuralgia and lepra vulgaris

℞ Extracti cinchonæ,
——— gentianæ, ā ā, ʒ i.,
Sulphatis ferri ʒ ss.,
Pulveris myrrhæ ʒ j.,
Olei carui gt. x.,
Syrupi zingiberis q. s.
M. ft. pil. No. lx. Tres, ter die sum.

℞ Sulphatis quininæ gr. x.,
Conservæ rosarum q. s.
M. ft. pil. No. x. Unus quaque hora.

In the apyrexia of intermittents.

ASTRINGENT.

℞ Extracti cinchonæ ʒ ij.,
Aluminis ʒ j.,
Syrupi q. s.
Ut fiant pilulæ triginta-sex. Sumantur quatuor quarta vel sexta quaque hora.

In passive hæmorrhages.

℞ Pulveris kino gr. xx.,
——— opii,
Mucilaginis acaciæ q. s.
M. ft. pil. iv. Unus quaque quarta hora

In diarrhœa, &c.

℞ Super-acetatis plumbi gr. xii.,
Pulveris opii vj.,
Conservæ rosarum q. s.
M. ft. pil. No. vj.

In hæmoptysis, and other hæmorrhages.

℞ Sulphatis aluminæ et potassæ,
Extracti cinchonæ,
Nucis myristicæ, ā ā, ℈ ss.,
Syrup. simpl. q. s.
Ft. pil. xx.

CATHARTIC.

℞ Scammonii pulv. gr. iv.,
Extracti taraxaci gr. xiv.
Fiant pilulæ sex, quarum sumat tres bis quotidie

In hypochondriasis and chronic hepatitis.

℞ Hydrargyri chloridi gr. iij.,
Pulveris jalapæ gr. ix.,
Mucilaginis acaciæ q. s.
Fiant pilulæ tres hora somni sumendæ.

To empty the bowels in bilious affections.

℞ Calomelanos gr. vj.,
Elaterii gr. j.,
Micæ panis q. s.
Fiant pilulæ sex. Sumatur una sexta quaque hora.

In ascites and simple hypertrophy of the heart.

℞ Ipecacuanhæ gr. x.,
Conii extracti ℈j.,
Aloes extracti ʒ ss.,
Mucilaginis acaciæ q. s.
Ut fiat massa in pilulas decem dividenda. Sumatur una hora somni quotidie.

In habitual costiveness.

℞ Pulveris jalapæ,
——— rhei,
Saponis albi, ā ā, ʒ ss.,
Calomelanos gr. xxv.,
Tartratis antimonii et potassæ gr. jss.,
Aqua dist. q. s.
M. ft. pil. No. xxv. Two to be taken at once, and repeated pro re nata.

℞ Massæ ex hydrargyro,
Pulveris jalapæ,
——— aloes, ā ā, gr. xv.,
Syrup. simpl. q. s.
M. ft. pil. xij.

℞ Aconiti extracti gr. j.,
Anthemidis extracti gr. xvj.
Fiant pilulæ quatuor æquales. Sumatur una sexta quaque hora.

In enlargement of the joints in chronic rheumatism.

EMMENAGOGUE.

℞ Ferri sulphatis ʒ j.,
Potassæ carbonatis gr. vj.,
Myrrhæ ʒ j.,
Pulveris aloes compositi ʒ ss.
Contunde simul, et dividatur massa in pilulas æquales triginta. Sumat tres bis quotidie.

In amenorrhœa with a languid pulse.

℞ Pilulæ hydrargyri ʒ i.
Divide in pilulas æquales quindecim. Sumatur una mane et nocte quotidie.

In suppression of the menstrual discharge.

℞ Sulphatis ferri ℈j.,
Pulveris sennæ,
——— jalapæ,
——— super-tartratis potassæ, ā ā, ℈ ss.
——— zingiberis gr. xii.,
Syrup. simpl. q. s.
Ft. pil. No. xxv. Hooper's pills. (Take three twice a day, followed by twenty drops tinct. mur. ferri, in a draught of bitter infusion: in amenorrhœa.)

℞ Sulphatis ferri exsiccati ℈j.,
Pulveris aloes ℈ij.,
——— caryophyl. gr. v.,
Terebinthinæ venetæ q. s.
M. ft. pil. xx. Unus, ter die sum.

DIURETIC.

℞ Pulveris digitalis gr. xii.,
Hydrargyri chloridi gr. iv.,
Opii gr. iv.,
Confectionis rosæ q. s.
Fiant pilulæ duodecim. Sumatur una octava quaque hora.

In hydrothorax, and ascites depending upon visceral obstruction.

℞ Pilulæ hydrargyri ʒj.,
Pulveris scillæ ʒj.,
Confectionis rosæ q. s.
Fiant pilulæ viginti. Sumatur una octava quaque hora.

ascites and anasarca.

℞ Balsami copaibæ ʒij.,
Magnesiæ ustæ gr. vij.
M. Div. in pil. gr. iv. each.

℞ Pulveris scillæ exsiccatæ gr. iv.,
——— digitalis foliorum gr. x.,
——— calomelanos gr. vj.,
——— myrrhæ ℈j.
Simul tere et adde—
Assafœtidæ ʒss.,
Extracti gentianæ q. s.
M. ft. pil. xv. Unus mane et nocte

DIAPHORETIC.

℞ Antimonii potassio-tartratis gr. i.,
Opii,
Hydrargyri chloridi, a a, gr. i.,
Confectionis rosæ q. s.
Fiant pilulæ, octava quaque hora sumendæ.

In acute rheumatism.

℞ Antimonii potassio-tartratis gr. ii.,
Opii gr. vi.,
Camphoræ gr. xxxvi.,
Spiritus rectificati, min. iii.,
Confectionis rosæ q. s.
Fiant pilulæ æquales duodecim, quarum sumatur una quarta quaque hora.

In fevers.

℞ Hydrargyri sulphureti rubri,
Pulveris serpentariæ virginianæ, a a, ʒss.,
Syrupi simplicis q. s.
M. ft. pil. No. xii. Two, three times a day. Alterative and diaphoretic.

In cutaneous affections

℞ Calomelanos,
Antimonii sulphureti, a a ʒss.,
Pulveris guaiaci ʒj.,
Balsami copaibæ q. s.

M. ft. pil ix. (Plummer's Pills.)
In secondary syphilis, old ulcers, gleets, &c.

EXPECTORANT

℞ Pulveris scillæ gr. xxx.,
Ammoniaci ʒ iss.,
Extract. conii gr. xxx
Contunde simul, et divide massam in pilulas æquales triginta, quarum sumat duas sexta quaque hora.
In asthma and chronic catarrh.

ANTISYPHILITIC.

℞ Pilulæ hydrargyri ʒ i.,
Divide in pilulas æquales duodecim. Sumatur una mane nocteque quotidie.
In syphilis, leprous eruptions, and chronic hepatitis.

℞ Hydrargyri chloridi ℈ i.,
Opii gr. v.,
Confectionis rosæ q. s.
Fiant pilulæ viginti. Sumatur una mane et nocte quotidie
In syphilitic cases.

ANTILITHIC.

℞ Sodæ carbonatis exsiccatæ ʒ iss.,
Pulveris cinnamomi comp. ʒ ss.,
Saponis ʒ ss.,
Balsami peruviani q. s.
Fiant pilulæ æquales triginta. Sumantur tres ter quotidie.
In calculous affections.

TONIC AND PURGATIVE COMBINED.

℞ Ferri sesquichloridi ʒ i.,
Extracti aloes,
——— gentianæ, ā ā, ʒ ss.
Contunduntur simul, et dividatur moles in pilulas triginta, quarum sumantur duæ ter quotidie.
In dyspepsia, hysteria, scrofula, and mesenteric obstructions.

℞ Quinæ sulphatis ʒ ss.—ʒ i.,
Potassæ sulphatis ʒ iss.,
Gum. galbani ℈ iv.,
Ext. gentianæ ʒ i.,
Massæ pilulæ aloes cum myrrha ʒ iij.,
Thebiacæ purif. q. s.
M. ft. pil. cxx. Dose, ij. or iij., two or three times a day.

℞ Quinæ sulphatis ℈ i.,
Aloes extr. purif. ʒ ss.,
Ext. gentianæ ʒ j.
M. ft. pil. xxiv.

℞ Cupri sulphatis gr. x.,
Pulv. rhei ʒ j.,
Extr. anthemidis ʒ ij.,
Syrup. simplic. q. s.
M. ft. pil. xl. Dose, i. to iii.
In leucorrhœa, gleet, and chorea.

ALTERATIVE.

℞ Hydrargyri biniodidi gr. iv.,
Serpentariæ in pulv. ℥ i.,
Syrupi aurantii q. s.
Misce, et divide in pilulas viginti-quatuor, quarum sumantur duæ ter quotidie.

In herpetic and other obstinate cutaneous affections.

℞ Hydrargyri iodidi gr. iij.,
Micæ panis gr. iij.
Fiant pilulæ sex æquales. Sumatur i. ter quotidie.

In secondary syphilis.

℞ Antimonii oxysulphureti ℈ j.,
Florum sulphuris ʒ ij.,
Camphoræ rasæ ℈ j.,
Extract. taraxici (vel extract. sarzæ) ʒ iijss.
M. ft. pil. xcv. Duas vel tres, ter quotidie

℞ Antimonii potassio-tartratis gr. iv.,
Pilulæ hydrargyri ℈ i.,
Saponis castil.,
Gum. ammoniaci,
Assafœtidæ,
Extract. aloes, ā ā, ʒ ss.
M. ft. pil. lxxv. Duas ter die.

℞ Kermis mineral. gr. j.,
Hydrargyri chloridi gr. ij.,
Ext. fumariæ gr. x.
Ft. pil. iij. per dose.

℞ Saponis hisp. ʒ iij.
Gum. ammoniaci ʒ i.,
Aloes ʒ j.,
Rhei pulv. ʒ j.,
Assafœtidæ,
Croci, ā ā ʒ ss.
Syrup. q. s.
Ft. pil. c. Dose ii to iv. two or three times a day

DRAUGHTS.

NARCOTIC.

℞ Misturæ camphoræ f ℥ iss.
Tincturæ opii ♏xxxv.,
Ætheris sulphurici f ℥ i.,
Syrupi croci f ʒ ss.
Fiat haustus in promptu habendus, et urgente febris paroxysmo sumendus.

In intermittent headache.

℞ Ammoniæ carbonatis gr. xv.,
Succi limonis recentis f ʒ iv.,
Aquæ distillatæ f ʒ j.,
Spiritus myristicæ f ℥ i.,
Syrupi aurantii f ʒ ss.,
Tincturæ conii ♏xx.

Fiat haustus ter die sumendus, addendo de die in diem tincturæ conii ♏v.; donec dosis ad ♏lxxx. pervenerit in singulis haustibus.

In diseases of increased irritability.

ANTISPASMODIC

℞ Misturæ moschi f ʒ xiv.,
Liquoris ammoniæ min. xvi.,
Tincturæ castorei f ʒ i.,
Syrupi papaveris f ʒ ss.
Fiat haustus, quarta quaque hora sumendus.

In hysteria and convulsive affections, after the bowels have been effectually cleared.

℞ Olei anisi ♏x.,
Magnesiæ ℈j.,
Tincturæ sennæ f ʒ ii.,
Aquæ menthæ piperitæ f ʒ s.
Fiat haustus, urgente flatu sumendus.

In spasm of the stomach arising from flatulence.

TONIC.

℞ Infusi cinchonæ cordifoliæ f ℥ iss.,
Tincturæ cinchonæ compositæ f ʒ j.,
Pulveris cinchonæ cordifoliæ ℈j.,
Syrupi aurantii f ʒ ss.
Fiat haustus, secunda quaque hora sumendus.

In intermittents and acute rheumatism, after purging.

℞ Infusi cascarillæ f ℥ iss.,
Quinæ disulphatis gr. ij.,
Tincturæ cascarillæ,
——— zingiberis, ā ā, f ʒ i.,
Acidi sulphurici diluti ♏viij.,
Fiat haustus bis quotidie sumendus.

In dyspepsia arising from intemperance.

℞ Ferri iodidi gr. iij.,
Aquæ distillatæ f ʒ xij.
Fiat haustus ter quotidie sumendus.

In chlorosis, scrofula, atonic amenorrhœa.

⁂ It is almost impossible to preserve the iodide of iron in the solid form; it should therefore be kept in a solution with a coil of soft wire in the bottle, and of a strength of gr. iij. to the f ʒ j; or it should be kept in the form of syrup of the same strength.

ASTRINGENT.

℞ Extracti hæmatoxyli gr. xii.,
Aquæ cinnamomi f ʒ xv.,
Tincturæ catechu f ʒ i.
Fiat haustus, quarta quaque hora vel post dejectiones singulas liquidas sumendus.

In diarrhœas and protracted dysentery.

EMETIC.

℞ Pulveris ipecacuanhæ ℈i.,
Vini ipecacuanhæ f ʒ ii.,
Aquæ communis f ʒ vi.
Fiat haustus emeticus, quamprimum vel vespere sumendus.

For unloading the stomach in ordinary cases.

℞ Zinci sulphatis ℥ss.,
Aquæ distillatæ f℥iss.
Fiat haustus, quamprimum sumendus.

In the commencement of the paroxysm of intermittent fever, or in cases of poisons having been taken into the stomach

℞ Cupri sulphatis gr. xv.,
Acidi sulphurici diluti ♏ij.,
Aquæ distillatæ f℥j.
Fiat haustus quamprimum sumendus.

In cases of poisoning.

CATHARTIC.

℞ Potassæ tartratis ʒi.,
Tincturæ sennæ fʒi.,
Infusi sennæ fʒxviss.,
Syrupi croci fʒss.
Fiat haustus, quamprimum vel primo mane sumendus.

In acute diseases.

℞ Magnesiæ sulphatis ʒii.,
Infusi rosæ fʒxiv.,
Acidi sulphurici diluti ♏x.,
Mannæ ʒii.
Fiat haustus quarta quaque hora sumendus

In inflammatory affections.

℞ Sennæ infusi f℥j.,
Magnesiæ sulphatis ʒiij.,
Camphoræ misturæ fʒv.,
Tincturæ cardamomi fʒj.
Fiat haustus mane sumendus.

In acute diseases.

DIURETIC.

℞ Tincturæ jalapæ fʒij.,
Aceti scillæ fʒi.,
Aquæ menthæ piperitæ fʒviii.
Fiat haustus ter in die sumendus.

℞ Potassæ nitratis gr. viii.,
Tincturæ digitalis ♏xvi.,
Infusi rosæ fʒxiii.,
Syrupi rosæ f℥j.
Fiat haustus ter in die sumendus.

In dropsy.

DIAPHORETIC.

℞ Potassæ carbonatis ℈i.,
Succi limonis recentis fʒiv.,
Antimonii potassio tartratis gr. 1-6th,
Aquæ distillatæ fʒxi.,
Syrupi papaveris fʒj.
Fiat haustus, quarta vel sexta quaque hora sumendus

℞ Liquoris ammoniæ acetatis fʒiv.,
Misturæ camphoræ fʒx.,
Vini ipecacuanhæ ♏x.,
Syrupi tolutani fʒss.
Fiat haustus sexta quaque hora sumendus.

In fevers and inflammatory diseases.

REFRIGERANT.

℞ Potassæ nitratis gr. xii.,
Misturæ amygdalæ f ℥ ss.,
Syrupi tolutani f ℥ i.
Fiat haustus quarta quaque hora sumendus.

℞ Potassæ carbonatis ℈ i.,
Syrupi f ʒ ss.,
Spiritus myristicæ f ʒ ss.,
Aquæ distillatæ f ℥ xi.
Fiat haustus, in effervescentis impetu ipso cum succi limonis cochleario magno, secunda quaque hora sumendus.

In fevers and inflammatory diseases.

ANTACID.

℞ Magnesiæ ʒ i.,
Aquæ menthæ piperitæ f ℥ iss.,
Tincturæ aurantii f ʒ i.
Fiat haustus pro re nata sumendus.

In heartburn and other cases of acidity of the stomach.

℞ Liquoris ammoniæ ♏ xvi.,
Misturæ amygdalæ amaræ f ℥ ii.,
Tincturæ opii ♏ x.
Fiat haustus ter die sumendus.

In acidities of the primæ viæ.

SEDATIVE.

℞ Hydrocyanici acidi diluti ♏ iij.,
Calumbæ tincturæ f ʒ j.,
Aquæ distillatæ f ʒ xj.
Fiat haustus bis terve quotidie sumendus

In irritable gastric dyspepsia.

℞ Tincturæ ferri sesquichloridi f ʒ j.,
Aquæ distillatæ f ℥ vj.,
Olei aurantii ♏ vj.,
Sacchari albi ʒ j.
Fiat mistura, cujus sumatur quarta pars ter quotid.

In general debility.

MIXTURES.

TONIC.

℞ Infusi calumbæ f ℥ vss.
Tincturæ cinnamomi compositæ f ʒ iv.,
Syrupi aurantii f ʒ ii.
Fiat mistura, cujus cochlearia duo majora quarta quaque hora sumantur.

In debilities of the digestive organs, and to check the severe vomiting which often occurs during pregnancy.

ASTRINGENT.

℞ Catechu extracti ʒ ii.,
Aquæ cinnamomi f ℥ viii.,
Tincturæ opii ♏ ix.
Fiat [illegible] ntur cochlearia tria magna post [illegible] sidas.

In the [illegible] of dysentery.

EMETIC.

℞ Antimonii potassio-tartratis gr. viii.,
Aquæ distillatæ f ℥ vi.,
Syrupi mori f ʒ i.
Fiat mistura, cujus cochlearia magna duo, quamprimum, et octavis minutis donec evomuerit, sumenda.

℞ Pulveris ipecacuanhæ ʒ ss.,
Antimonii potassio tartratis gr. ij.,
Tincturæ scillæ f ʒ i.,
Aquæ distillatæ f ℥ viss.
Fiat mistura, cujus sumat quamprimum cochlearia majora quatuor, et cochlearia duo sexta quaque parte horæ, donec supervenerit vomitus.

In dropsies, before exhibiting the foxglove.

CATHARTIC.

℞ Potassæ sulphatis ʒ ii.,
Aquæ fontanæ f ℥ vss.,
Tincturæ jalapæ f ʒ iv.
Sit mistura, cujus sumat cochlearia duo magna omni bihorio.

℞ Rosæ confectionis ℥ j.
Aquæ ferventis f ℥ viij.
Tere optime et post horam cola

℞ Magnesiæ sulphatis ʒ vj.
Liquoris colatæ f ℥ viss.,
Sulphurici acidi diluti f ʒ j.,
Cardamomi tincturæ f ʒ iij.
Fiat mistura. Sumantur cochlearia tria majora ter quotidie

In a bilious state of habit.

EXPECTORANT.

℞ Misturæ amygdalæ amaræ f ℥ v.,
Vini ipecacuanhæ,
Tincturæ scillæ, ā ā, f ʒ i.,
Syrupi tolutani f ʒ vi.
Misce. Sumat cochleare magnum urgente tussi.

In humoral asthma, and the latter stage of catarrh.

℞ Mistura ammoniaci f ℥ iv.,
Vini ipecacuanhæ f ℥ iv.,
Tincturæ camphoræ comp. f ʒ ss.,
Syrupi tolutani f ℥ i
Misce. Cochleare modicum urgente tussi sumendum.

In chronic or old asthmas.

DEMULCENTS.

℞ Decocti althææ officinalis f ℥ vi.,
Syrupi f ℥ i.
Fiat mistura, cujus sumatur tertia pars, sexta quaque hora.

In calculous cases, and inflammation of the kidneys.

DETERGENT GARGLE.

℞ Potassæ nitratis ʒ ii.,
Mellis rosæ f ʒ iv.,
Infusi rosæ f ℥ vss.
Misce. Fiat gargarisma sæpe utendum

In inflammatory sore throat.

ASTRINGENT GARGLE.

℞ Infusi rosæ f ℥ vii.,
Tincturæ catechu f ʒ vi.,
Acidi sulphurici diluti f ʒ i.
Sit gargarisma sæpe utendum.
In relaxations of the uvula.

STIMULANT GARGLE.

℞ Capsici tincturæ f ʒ iss.,
Rosæ infusi f ℥ viss.,
Hydrochlorici acidi diluti f ʒ ss.,
Syrupi croci f ʒ ij.
Fiat gargarisma subinde utendum.
In cynanche maligna.

EXTERNAL APPLICATIONS

LOTIONS.

℞ Ammoniæ hydrochloratis ʒ i.,
Aquæ fontanæ f ℥ v.,
Spiritus rectificati f ℥ i.
Misce, ut fiat lotio tumori applicanda.
In swelled testicle, and other inflammatory tumors.

℞ Opii ʒ ii.,
Aceti distillati f ℥ vi.
Tere ut fiat lotio, parti dolenti applicanda.
To painful affections of the joints, and in colic.

STIMULANT EMBROCATION.

℞ Linimenti ammoniæ f ʒ vi.,
Olivæ olei f ʒ ii.
Fiat embrocatio, cum panno laneo faucibus externis applicanda.
In cynanche tonsillaris.

STIMULANT AND ANODYNE EMBROCATION

℞ Linimenti camphoræ compositi f ʒ ix.,
Tincturæ cantharidis f ʒ i.,
——— opii f ʒ ii.
Parti dolenti applicandum.
To be rubbed over the bowels in colic, cramp, and in painful affections of the joints.

POWDERS.

℞ Pulveris gummi acaciæ ℥ ss.,
Aluminis gr. v.
Misce diligenter ut fiat pulvis, cujus inspergatur pauxillum super mamillas pro re nata.
In sore nipples, to be applied after suckling.

℞ Acetatis plumbi ʒ i.,
Pulveris cinchonæ ʒ vi
Tere, ut fiat pulvis, c [illegible] ulcera omni mane spergatur.
For scrofulous ulcers.

OINTMENTS.

℞ Hydrargyri nitrico-oxydi ℈ j.,
Adipis ℥ i.
Tere diligenter in mortario donec bene misceantur.
In ulcerations of the eyelids.

℞ Zinci oxydi ℈ j.,
Adipis ℥ i.
Tere optime in mortario, ut fiat unguentum
In porrigo scutulata.

℞ Creasoti f ʒ j.,
Unguenti cetacei ℥ j.
Tere ut fiat unguentum.
In porrigo scutulata.

℞ Iodinii ʒ j.,
Adipis ℥ j.
Tere optime ut fiat unguentum cujus pauxillum tumori maneque nocte applicandum.
In glandular swellings and incipient bronchocele.

℞ Antimonii potassio-tartratis ʒ j.,
Sacchari albi pulveris ʒ j.,
Adipis ℥ j.
Tere ut fiat unguentum. Magnitudo glandis, parti dolenti omni mane et nocte, ope fricationis donec ulcera adfuerint, applicanda.
As a counter-irritant in the inflammation of internal organs

COLLYRIA.

ANODYNE COLLYRIUM.

℞ Sydenham's laudanum,
Tincture of saffron, ā ā, ʒ j.
Decoction of flaxseed ℥ ij.
M. *Paris Hospitals*

ASTRINGENT COLLYRIA.

℞ Sulph. zinci ʒ 1 part,
Aquæ rosar. ʒ 250 parts,
Alcohol ʒ 8 parts.
M. *Paris Hospitals*

℞ Sulph. zinci gr. xv.,
Aquæ rosar. ℥ iv.
Mix. *Paris Hospitals*

℞ Aquæ rosar.,
Aquæ distill., ā ā, ℥ ij.,
Sulph. alum. et potassæ ℈ i.
M.
In chronic inflamm

℞ Infusion of elder flowers ℔j.,
Subacetate of lead j. *Paris Hospitals*

DRY COLLYRIUM OF MERCURY.

℞ Sacchari albi ʒij.,
Oxydi hydrargyri rubri gr. x.,
Oxydi zinci impuri præparati ℈j
Fiat pulvis. *M. Dupuytren*

DRY COLLYRIUM OF OPIUM.

℞ Pulveris opii gr. iv.,
Calomelanos,
Sacchari purificati, āā, ℈j.
Tere bene.

These dry collyria are to be blown into the eyes, for the removal of specks on the cornea, &c., &c.

COLLYRIUM OF ACETATE OF ZINC.

℞ Sulphatis zinci,
Superacetatis plumbi, āā, gr. vj.,
Aquæ rosarum ℥iv.
M. To be filtered.

COLLYRIUM OF SUBACETATE OF LEAD, ETC.

℞ Liquoris plumbi acetatis gtt. xij.,
Vini opii gtt. xl.,
Aquæ rosar. ℥iv.
Ft. collyrium.

COLLYRIUM OF VINEGAR.

℞ Aceti distillati ℥j.,
Spiritus vini diluti ℥ss.,
Aquæ rosarum ℥viij.
Ft. mistura.

After depletion, and to weak eyes.

COLLYRIUM OF ACETATE OF AMMONIA AND CAMPHOR.

℞ Liquoris ammoniæ acetatis ℥ij.,
Misturæ camphoræ ℥vj.
M. A mild astringent.

COLLYRIUM OF ACETATE OF AMMONIA WITH OPIUM.

℞ Liquoris ammoniæ acetatis ℥ij.,
Aquæ ferventis ℥vj.,
Extract. opii mollis gr. x.
Dissolve the opium in the hot water, strain, and add the liquor of acetate of ammonia.

In acute and painful ophthalmia, after depletion.

COLLYRIUM OF OPIUM AND CAMPHOR.

℞ Extracti opii mollis gr. x.,
Camphoræ gr. vj.,
Aquæ ferventis ℥xij.
Rub the camphor and opium well together in a mortar, and add the water. Strain or filter.

In painful ophthalmia.

COLLYRIUM OF SULPHATE OF COPPER.

℞ Sulphatis cupri gr. vj.,
Camphoræ ʒj.,
Aquæ ferventis ℥viij.
Rub the camphor with the water, then strain, and add the [illegible] copper.

COLLYRIUM OF CORROSIVE SUBLIMATE.

℞ Hydrargyri muriatis gr. ij.,
Aquæ distillatæ ℥ viij.
Fiat solutio.

In gonorrhœal and scrofulous ophthalmia.

DRY COLLYRIUM OF SUGAR.

℞ Sacchari albi,
Oxydi zinci, ā ā, partes æquales.
Tere in pulverem. *M Recamier.*

COLLYRIUM OF POPPIES.

℞ Fomenti papaveris capsularum ℥ iv.
Aquæ rosar.,
Misturæ camphoræ, ā ā, ℥ ij.
Mix.

In acute ophthalmia.

COLLYRIUM OF NITRATE OF SILVER.

℞ Nitratis argenti gr. ij.,
Aquæ distillatæ ℥ ij.
Fiat solutio.

At the close of acute ophthalmia.

EMOLLIENT COLLYRIUM.

℞ Radicis althææ officinalis ℥ ij.,
Aquæ distillatæ ℔ j.
Infuse for three hours near the fire, and strain.

In inflammation accompanied with much irritation.

ANODYNE COLLYRIUM.

℞ Colchici autumnalis ʒ j.
Aquæ lini bullientis ℥ iv.,
Tincturæ opii ʒ j.
Fiat mistura.

In severe ophthalmia, where there is great sensibility.

SELECT FORMULÆ FOR INFANTS.

(FROM STEWART'S BILLARD.)

SEDATIVES.

℞ Aquæ distillatæ ℥ j.,
Mucil. gum. acac. ℥ ss.
Syrupi simplicis ℥ ss.
Tincturæ opii, guttam.

Dose—A teaspoonful, repeated every half hour, till rest be procured; but after the first month, double that quantity will be required. After the third month, half a drop of laudanum may be given for a dose, one drop at six months, and two after the first year. *Evanson and Maunsell*

℞ Cretæ ℥ ss.,
Antim. oxysulph. gr. iv.
Ext. hyoscyami gr. xiij.,
Sacchar. alb. ℥ ij.

Equal ℥ viij. every two hours in infantile asthma. *Urban*

℞ Ext. hyoscyam. gr. x.,
Vini antim. ʒ ij.
Eight drops four times a day to an infant a year old, in hooping-cough. *Hufeland.*

℞ Aq. fœniculi ʒ iv.
Vini antimonii ʒ j.
Ext. hyoscyam. gr. iij.,
Syrup. althææ ℥ jss.
A teaspoonful every two hours to an infant from six to twelve months, as a cough mixture. *Vogt.*

℞ Ext. belladonnæ gr. j.,
Aq. distill. ℥ j.
To infants, five drops four times a day, in hooping-cough. *Wendt*

℞ Pulv. rad. belladon. gr. iv
—— doveri gr. x.,
Lac. sulphuris ℈ iv.,
Sacchar. alb. ʒ ij.
M. Divid. in chart. xx.
In hooping-cough, one of these powders every three hours for a child of two years; one-fourth for a child of eight or nine months. Between each dose a teaspoonful of the following mixture to a child two years old; to be diminished according to the age of the child:
℞ Aq. chamomil. ℥ j.,
Syrup. simp. ʒ ij.,
Acid. Prussic. Vauqul. gt. xij. *Kahleiss.*

℞ Magnesiæ alb. ust. ℈ j
Tinct. fetid. gt. lx.,
—— opii gt. xx.,
Aquæ font. ʒ j.
M. Twenty drops to a child from two weeks to one month, in colic; if not relieved in half an hour, two drops more;—increasing the dose as the child advances in age. *Dewees*

℞ Ext. conii maculat. ʒ j.,
Tinct. camp. opiat. ℥ ss.,
Syrup. tolu. ℥ ss,
Aquæ rosar. ℥ iv.
M Dose—Half a teaspoonful to a child one year old, in pertussis

CARMINATIVES AND ANTACIDS.

℞ Magn. carb. ʒ ss.,
Tinct. rhei ʒ j.,
Aq. menth. ℥ vj.,
Syrup. alth. ℥ j.
M Sit mistura.
S. A teaspoonful every hour for an infant of six months, troubled with acidity of the stomach.

℞ Magn. carb. ℈ ij.
Pulv. rhei ℈ j.,
Aq. fœniculi ℥ iss.
Syrup. rhei ℥ ss.
M. Sit mistura.
Dose—A teaspoonful.

℞ Magnesiæ gr. viij.,
Sem. anisi cont.,
Sem. fœnic. cont., ā ā, gr. ij.,
Croci gr. j.,
Sacchar. alb. gr. vij.
Contunde bene simul ut sit pulvis.
In tormina of infants, one half to be taken at once, and the remainder in half an hour. *Copland.*

℞ Sodæ sesquicarb. gr. iss.,
Pulv. rhei gr. iij.
Pulv. valerian. gr. j.
S. A powder thrice a day for infants subject to flatulent colic

℞ Magn. carb. ʒ j.,
Pulv. rhei ℈ ss.,
Saponis ℈ j.
Ft. pulvis.
S. Ten grains thrice a day for constipation with acidity. *Berends*

℞ Aquæ fœniculi ʒ vij.,
Potassæ bicarb. ℈ ij.,
Syrupi ℥ j.
M. A dessert-spoonful occasionally.

℞ Potassæ bicarb. ʒ ss.,
Aq. distill. ℥ iss.
Solve.
S. Ten to forty drops daily. In infantile convulsions. *Hamilton*

℞ Potassæ bicarb. ʒ ij.,
Succ. limon. q. s. ad saturationem,
Infus. rhei ℥ iss.,
Mannæ ℥ ss.
One or two teaspoonfuls to infants in gastric disorders.

℞ Hyd. c. cretæ ℥ ij.,
Sodæ carb. exsiccat. ʒ iv.
M. From six to twelve grains for an infant. *Copland*

ANTISPASMODICS.

℞ Cretæ gr. iij.,
Mosch. gr. ss.,
Croci gr. i.
Ft. pulv. dent. tal. dos. No. iv.
S. One every hour for an infant. *Frankel*

℞ Moschi ℈ j.,
Pulveris acaciæ ʒ ij.,
Tere cum aq. cinnam. ℥ j.,
Syrup. althææ ℥ iij.
M. Sit mistura.
S A spoonful every hour.

℞ Moschi gr. vj.,
Ammon. sesquicarb. gr. iv.,
Sacchari albi ʒ iij.,
Misce terendo et adde,
Aq. flor. sambuci ℥ ijss
M. Sit mistura.
S. A teaspoonful every hour in infantile fits. *Fonde*

℞ Assafœtidæ gr. vj.—viij.,
Infus. anthemid ℥ j.,
Acaciæ q. s.
M. f. enema.
℞ Lactis tepefact. ℥ j.,
Aq. menth. pip. ʒ ss.,
Tinct. assafœtid. ʒ j.
M. Injicienda pro enemata. In convulsions.

EXPECTORANTS AND DEMULCENTS.

℞ Pulv. ipecacuanhæ,
Calomelanos, ā ā, gr. x.,
Sacchar. albi gr. xx.
S. One or two grains every second or third hour, as an expectorant in bronchial irritation. *Evanson and Maunsell.*

℞ Decoct. polyg. senegæ ℥ iijss.,
Oxymel. scillæ ʒ ij.,
Vini ipecac. ʒ ij.,
Antim. tart. gr. j.
S. Ten minims to a scruple, as an expectorant.
Evanson and Maunsell.

℞ Mist. acaciæ ℥ iss.,
Aquæ puræ ℥ iijss.,
Syrupi ℥ ss. M.
S. A teaspoonful every two or three hours, for an infant from four to six months old.
℞ Rad. seneg. ʒ ss.,
Infus. in s. q. aq. fervid. per ¼ hor. colatur ℥ iv.
Adde,
Ammoniæ hydrochl. ʒ ss.,
Syrup. althææ ℥ j.
A teaspoonful every two hours to an infant. *Wendt.*

℞ Polygalæ senegæ,
Scillæ, ā ā, ℥ j.,
Aquæ ℔j.,
Mellis. despum. ℔ss.
F. Syrupus, quæquæ unciæ cujus addatur
Antimonii tart. granum. *Coxe's* Hive Syrup.

℞ Potass. tart. ʒ j.,
Vin. antim. ʒ ss.,
Aquæ anethi ℥ j.,
Oxymel. scillæ ℥ ss.,
Ft. glycyrrh. ʒ j. M.
One or two teaspoonfuls for an infant of twelve or eighteen months, in catarrhal fever. *Frankel.*
℞ Pulv. ipecac. gr. iij.,
Pulv. acaciæ,
Magnes. carb., ā ā, ʒ ss.,
Sacchari albi ʒ j. M.
Ft. pulvis divid. in xij. æquales part.
A powder every two hours in hooping-cough. *Volger.*
℞ Pulv. acaciæ ʒ ss.,
Sacchari purif. ℈ j.,
Amyli gr. x. M.
One to be taken frequently. Kirby.

℞ Tinct. opii j.,
Vin. ipecac gt. iv.,
Carb. sod. gr. ij.

To be given in a little sweetened water. For a child between one and two years. *Pearson.*

℞ Tincturæ opii camph. ℥j.,
Vin. antim. ℥ss.,
Suc. glycyrrh. ʒiij.
Pulv. g acaciæ ʒij.,
Aquæ fervent. ℥vj.

A teaspoonful every two or three hours during the night, to a child six months old, in troublesome cough. *Dewees*

℞ Emulsio amygd. ℥iv.,
Syrup. simpl. ℥j.,
Gum. tragacanth. gr. vi. M.

To be given by the teaspoonful. *H. des Enf.*

℞ Hordei ʒvj.,
Gum. acaciæ ʒj.,
Aquæ ℔ij.

Boil and strain them. Add
Sacchar. alb. q. s.

ASTRINGENTS.

℞ Hydr. c. creta ʒj,
Pulv. ipecac. comp. ℈ij.,
Magn. carb. ʒss.,
Tere bene simul.

Four to six grains, as a sedative for infants. *Copland.*

℞. Pulv. acaciæ ʒj.,
Solve in
Aq. fœniculi ℥j. Adde
Cretæ ʒss.,
Syrup. althææ ʒj.

A teaspoonful every two hours, in infantile diarrhœa. *Frankel.*

℞ Cretæ ppt. ℥ss.,
Saponis amygd.,
Pulv. rhei, ā ā, ʒj.,
Hydr. c. creta ℈j.,
Ol. fœniculi ♏viij.,
Sacchar. albi ʒij.
Tere bene simul.

From six grains to half a drachm twice or thrice a day, in infantile diarrhœa. *Copland.*

℞ Hyd. c. creta ℈ss.,
Pulv. cretæ co. ℈j.,
Pulv. tragacanth. co. ʒss
Divid. in partes x. æquales. Sumat. quarta quaque hora.

In diarrhœa, for an infant of four or six months.

℞ Cretæ ppt. ʒiij.,
Tinct. thebaic. gt. xx., vel. xxx.,
Ol. cinnam gt. j.,
Sacchar. alb. ʒij.,
Aq. font. ℥ij. M.

A teaspoonful every two, three, or four hours. *Dewees.*

EXTERNAL APPLICATIONS.

℞ Antim. tart. ʒj.,
  Aq. ferv. ℥j.,
  Tinct. cantharid. ℥j

An embrocation, in hooping-cough. *Stra.* [illegible]

℞ Ol. oliv. ℥ij.,
  Ol. succin.,
  Ol. caryoph., a a, ℥ss.

An embrocation, in hooping-cough

℞ Liniment. saponis iss.,
  Ol. succin. ℥ss.

In hooping-cough.

⁂ These embrocations should be applied both to the chest and along the course of the spine.

℞ Sulph. cupri ʒij.,
  Pulv. cinchon. ℥ss.,
  Aquæ ℥iv.

To be applied twice a day to gangrene of the cheek.
Dr. Coates.

℞ Sulph. sublim. ℥iv.,
  Cerat. simpl. ℔j.

Used in tinea. *H. des Enfans*

BATHS.

℞ Potassæ sulphur. ℥ij.,
  Aquæ ℔j.

This bath differs from the artificial Barège water, in containing half the quantity of sulphuret of potass.

Used in psora. *H. des Enfans.*

℞ Sulph. sublim.,
  Acetatis plumbi, a a, ʒj.,
  Zinci sulph. ʒss.

Used in psora. *H. de la Matern.*

ENEMATA.

℞ Syrup. papav. ʒij.
  Decoct. amyli ℥viij.

In diarrhœa of infants. *H. de la Matern.*

℞ Cap. papav. No. j.,
  Decoc. lini ℔jij. *H. de la Matern.*

℞ Cap. papav. ʒij.,
  Aquæ ℔j. *H. des Enfans.*

℞ Amyli ℥j.,
  Aquæ ℔ij. *H. des Enfans*

℞ Flor. anthemidis ʒij.,
  Aquæ ℔j.

Ft. enema. For infantile colic.

PURGATIVES.

℞ Pulv. rad. jalap. gr. xxiv.,
  Calomelanos gr. iv.,
  Sacchari alb. ʒij. M.
  Ft. pulvis divid. in xij. partes [illegible]

A teaspoonful twice a day for a [illegible] the infant, in obstruction of the bowels.
Wendt.

℞ Calomelanos gr. iij.,
Pulv. rhei,
Oleo-sacch. fœnic., a a, ℈j.
Ft. pulvis.

One-third of the above quantity is a dose for an infant, as a laxative. *Fischer*

℞ Ol. ricini ʒ iij.—iv.,
Pulv. acaciæ q. s.,
Aq. fœnic. ʒ ij.,
Mannæ ℥ ss.
Fiat emulsio.

A dessert-spoonful, repeated every hour till it operates. *Berends.*

℞ Ol. ricini ℥ ss.,
Syrup. rosæ ℥ ss.,
Vitel. ovi un.,
Tinct. sennæ ʒ iss.

One or two teaspoonfuls for an infant.

℞ Mannæ ℥ ss.,
Emulsio arab. ℥ ss.,
Syrup. violæ ʒ ij.,
Bene admisce, et adde
Aquæ menth. ℥ j. M.

S. From ʒ j. to ʒ ij. every third hour, until an effect is produced. *Evanson and Maunsell*

℞ Infusi sennæ ℥ j.,
Aquæ menthæ ℥ ss.,
Magnesiæ ℈j.
Mannæ ʒ ii.,
Tinct. rhei ʒ j.,
Syrup. rosæ ʒ ij. M.

S. From ʒ j. to ʒ ij. every third hour. *Evanson and Maunsell*

℞ Sulph. sub. gr. x.—xx.,
Mist. acaciæ ʒ ij.,
Sacchari alb. ℥ ss.,
Aquæ rosæ ʒ j.

A teaspoonful hourly, shaking the phial well each time; for an infant in the first year. *Kopp*

℞ Fol. sennæ ℥ ss.,
Aquæ ferv. ℔j.,
Sodæ sulph. ℥ ss.

To be used as an enema *H. des Enfans.*

℞ Mag. calcin. ʒ ss.,
Pulv. rhei gr. vj.,
Sacchar. albi ʒ j.,
Ol. menth. gt. vj.,
Aquæ ℥ iss.

A dessert-spoonful every two hours. *H. d'Amer*

℞ Mannæ ℥ iij.
Ol. amygd.,
Syrup. gum., a a, ℥ j.

From one to four drachms to be given to young infants, as a mild laxative. *H. d'Allem*

℞ Decocti hordei ℥v.,
Muriatis sodæ ʒiij.,
Ol. olivarum ʒv. M.
To be used as an enema.

EMETICS.

℞ Vini antim. ℥ss.
Syrup. althææ ℥j.
A teaspoonful every quarter of an hour, to a child three or four months old. *Wendt.*

℞ Pulv. ipecac. gr. xij.,
Syrup. simpl. ℥j.,
A teaspoonful every quarter of an hour, to an infant five or six months old.

℞ Vin. antim. ℥ss.
Oxymel. scillæ ʒij.
A teaspoonful for an infant at the breast. *Frankel.*

℞ Aquæ ℥j.,
Vini ipecac. ℥ss.
Syrupi ℥ss.
One or two drachms frequently, till vomiting ensue.
Evanson and Maunsell.

℞ Pulv. chel. cancror. ʒss.,
Antim. tart. gr. ij. M.
In hooping-cough, one half to two grains, according to the age of the child. *Fothergill.*

TONICS AND STIMULANTS.

℞ Ferri tart. ʒj.,
Syrup. simpl. q. s.
M. Ft. bol. No. iij.
As a tonic for debilitated infants. *H. des Enfans.*

℞ Cinchonæ ℥ss.,
Aquæ ℔j. M.
To be used as an enema when the stomach rejects cinchona.
H. des Enfans.

℞ Aquæ distillat. ℥iss.,
Quinæ disulph. gr. ij.,
Acid. sulph. aromat. gtts. xvj.,
Syrupi caryoph. ℥ss. M.
From one to two drachms thrice a day.
Evanson and Maunsell.

℞ Sal. martis gr. ij.,
Acid. sulph. gt. x.,
Sacchari albi ʒj.
Aquæ font. M.
Dose, ʒj. in chronic stage of cholera infantum. *Chapman.*

WINE WHEY.

℞ Lactis vacc. Oss.,
Vin. alb. ℥j. vel ℥ij.
Boil the milk, then add the wine.

EXTERNAL APPLICATIONS.

℞ Unguent. cetacei ℥j.,
Oxydi zinci,

Pulv. lycopodii, ā ā, ℈ ss.
Useful in ulceration of the eyelids. *Hufeland.*

℞ Croci sativ. ʒ j.,
Aquæ fervent. ℥ iv.,
Vin. opii ʒ j.
Anodyne collyrium. To be used when there is great pain. *Jadelot.*

℞ Infus. sambuci ℔ j.,
Zinci sulph. ℈ j.
Astringent collyrium. Much used in scrofulous ophthalmia which is usually accompanied with puriform exudation. *D'Huc.*

℞ Hydr. deuto-chlorid. gr. iv
Aq. puræ ℥ viij.
Used in syphilitic ophthalmia. *D'Huc.*

℞ Rad. althææ ʒ ij.,
Aquæ ℔ j.
Emollient collyrium. Used in inflamed conjunctivæ. *D'Huc.*

℞ Cerat. simpl. ℥ ij.,
Antim. tart. ʒ ij.,
Camphoræ ʒ j.
To be used by friction, to excite the skin; it is a powerful irritant in hooping-cough *D'Huc*

℞ Flores anthemidis,
Acet. commun., ā ā, ℥ iv.
A common revulsive. *H. des Enfans*

℞ Cataplasm. emol. ℔ ij.,
Ung. resinos. ℥ j. M.
Useful to hasten the suppuration of a phlegmonous tumor

℞ Pulv. lini. q. s.,
Decoc. rad. alth. q. s. M.
An emollient cataplasm.

℞ Cataplasm. emol. ℥ iv.,
Farinæ sinap. ʒ iv. M.
Used as a revulsive. *H des Enfans*

STIMULANT.

℞ Sp. ammon. arom. ʒ ss.,
Syrup. althææ,
Aquæ fœniculi ʒ j. M
A teaspoonful for an infant every hour *Frankel.*

ALTERATIVE.

℞ Calomelanos gr. iij.,
Amyli ʒ ss.,
Sacch. albi ʒ iss. M.
Ft. pulvis divid. in xii. partes æquales.
One thrice a day in infantile syphilis. *Wendt.*

DIETETIC PREPARATIONS.

BISCUIT JELLY.

White biscuit ℥iv., water Oiv.; boil down one half, strain, evaporate to Oj., add white sugar ℔j., red wine ℥iv., cinnamon water ʒj. In debility of the digestive organs.

HARTSHORN JELLY.

Hartshorn shavings ℥j., water Oiv., boil to Oij., strain; warm again with orange juice ℥j., white sugar ℥vj., sherry ℥v.

ANOTHER.

Hartshorn shavings ℥viii., water four pints, boil, strain, add white wine and sugar, each, ℥iv., or if a very clear jelly is required, syrup of vinegar ℥vi.; clarify with the white of two eggs, and strain, flavoring with cinnamon or lemon peel.

SAGO JELLY.

Soak sago in water for an hour, pour it off, adding more, boil till the sago is transparent, then add wine and sugar.

TAPIOCA JELLY.

Soak it in water for nine hours, then boil it gently till quite clear, and add lemon juice and peel, wine, sugar, and cinnamon.

GLOUCESTER JELLY.

Rice, sago, pearl barley, hartshorn shavings, Rad. Eringii, each ℥j., boil in ℔iij. of water to ℔j., and strain: nutritive, dissolved in broth, wine or milk.

ALMOND JELLY.

Sweet almonds, blanched, ℥i., white sugar ʒvj., water ℥iv. Rub into an emulsion, strain, and add melted hartshorn jelly ℥viii., orange-flower water ʒj., essence of lemon gt. iij.

BRANDE'S JELLY.

Ground jalap ℥ii., water twelve pints, calcined magnesia, ʒiii., boil to a jelly; not subject to grow mouldy.

CREME DE RIS.

Rice, three spoonfuls; boil in two pints of water to one, strain, add sweet almonds No. x., bitter almonds No. v., make an emulsion with sugar, a little cinnamon or orange flower water, and drink it warm in the morning.

ISINGLASS JELLY.

Isinglass ℥ii., water two pints, boil to one, strain, and add milk one pint, white sugar candy ℥i. Nutritive.

CHICKEN JELLY.

Cut a chicken into small pieces, bruise the bones, and put the whole into a stone jar with a cover that will make it water-tight. Set the jar in a large kettle of boiling water, and keep it boiling for three hours. Then strain off the liquid, and season it slightly with salt, pepper, and mace, or with loaf sugar and lemon juice, according to the condition of the patient for whom it is intended.

RICE JELLY.

Mix a quarter of a pound of rice, picked and washed, with lbs. of loaf sugar, and just sufficient water [illegible] it. Boil till it becomes a glutinous mass; then strain [illegible] served may be thought proper.

BREAD JELLY.

Boil a quart of water and suffer it to cool. Take one-third of a sixpenny loaf of bread, slice it, pare off the crust, and toast to a light brown. Then put it into the water, place it on hot coals in a covered pan, and boil it gently, till you find by putting some in a spoon to cool that the liquid has become a jelly. Strain through a cloth, and set it away for use. When it is to be taken, warm a teacupful, sweeten it with sugar, and add a little grated lemon peel.

ARROWROOT JELLY.

Mix three tablespoonfuls of best Bermuda arrowroot in a teacup of water till quite smooth; cover it, and let it stand a quarter of an hour. Put the yellow peel of a lemon into a pint of water, and boil to one-half. Then take out the lemon peel, and pour in the dissolved arrowroot, while the water is still boiling; add sufficient white sugar to sweeten it well, and let it boil together for five or six minutes. It may be sweetened, if thought necessary, with two teaspoonfuls of wine and some grated nutmeg. It may be boiled in milk instead of water, or in wine and water, according to the condition of the patient.

PORT WINE JELLY.

Melt ℥j. of isinglass in a little warm water, stir it into a pint of port wine, adding ℥ij. of sugar candy, ℥j. of gum arabic, and half a nutmeg grated. Mix all well, and boil it ten minutes, or till thoroughly dissolved. Then strain through muslin, and cool.

TAPIOCA JELLY.

Take of tapioca two spoonfuls, water one pint; boil gently for an hour, or until it assumes a jelly-like appearance. Add sugar, wine, and nutmeg, with lemon juice, to suit the taste and the nature of the case. (This is improved by washing the tapioca well, and allowing it to steep for five or six hours, changing the water three times; then proceed as before.)

SAGO.

Wash in two or three waters, and let it soak for two or three hours. To a teacupful of sago, allow a quart of water, and some of the peel of a lemon. Simmer till all the grains look transparent. Then add wine and nutmeg, and boil together for a few minutes; (or plain, with milk.)

BARLEY WATER.

Wash clean some pearl barley, and to ℥ij. of barley add one quart of water. Add a few raisins, or some lemon peel and sugar, and boil slowly till reduced one half. Then strain and sweeten. As nourishment in inflammatory diseases.

RICE WATER.

Take of rice ℥ij., wash it well, and add two quarts of water. Boil for an hour and a half, and then add sugar and nutmeg, as much as may be required. To be taken *ad libitum*. Mixed with milk, this is an excellent diet for children.

VEGETABLE SOUP.

Take one potato, one t [illegible] onion, with a little celery,
or celery seed. Slice, an [illegible] of water for an hour;
add as much salt as is a [illegible] whole upon a piece
of dry toast. To be us [illegible] would be improper

INDIAN GRUEL.

Put three large tablespoonfuls of Indian meal, sifted, into a quart of water in a large bowl; wash with several waters, turning off the water as the meal settles; then boil for twenty minutes, stirring all the while; add a little salt; then strain and sweeten, adding a little butter, wine, and nutmeg, if the case require. It should be taken warm. *Oat-meal Gruel* may be prepared in the same way; but if made of coarse grits, it should be strained, after boiling, and then seasoned.

PANADA.

Boil some slices of soft bread in a quart of water for five minutes. Then beat the bread smooth in a deep dish, mixing with it a little of the water in which it has been boiled; mix with it a bit of fresh butter, and sugar and nutmeg according to circumstances. Or, it may be made by grating some bread, or grating or pounding a few crackers; pour on boiling water; beat it well, and add sugar and nutmeg, or cinnamon.

BOILED FLOUR.

Take ℔j. of fine flour, tie it up as tight as possible in a linen rag; dip it frequently in cold water, and dredge the outside with flour till a crust is formed on it. Then boil until it becomes a hard dry mass.

This may be grated and prepared in the same manner as arrowroot, for which it is an excellent substitute.

BEEF TEA.

Cut ℔j. of lean beef into shreds, and boil for twenty minutes in one quart of water, taking off the scum as it rises—often cooling; strain. Very nourishing and palatable.

ESSENCE OF BEEF.

Put a pound of lean beef, thinly sliced and slightly salted, into a porter-bottle, or jar, closely corked. Place this in a vessel of cold water, and boil for an hour or more. Then decant and skim the liquid. Chicken tea may be made in the same way.

CHICKEN WATER.

Take half a chicken; strip off all the fat, and break the bones; add two quarts of water, boil for fifteen or twenty minutes, and season with salt.

MUTTON BROTH.

To one pound of lean mutton, allow one quart of water; season with a little salt, and some parsley, and put in some large pieces of the crust of bread. Boil slowly for two or three hours, skimming carefully. Beef, veal, or chicken broth may be made in the same manner. Vegetables, barley, rice, &c., can be added, if expedient. Mutton broth may be made more speedily, by taking three chops; beat the meat on both sides, and slice thin, put it into a sauce-pan with a pint of water, a little salt, and some crusts of bread, or some parsley, and a small onion, sliced thin. Cover the sauce-pan, and boil fast; skim, and in half an hour it will be ready for use. It renders mutton broth more palatable to *broil* the chops before boiling.

INFUSION OF MALT.

Take of ground malt Oj., hot water Oiij. Infuse for two hours and strain. Add sugar or lemon juice, if necessary.

WINE WHEY.

Boil a pint of milk, and when boiling, add a large wine-glass of Sherry or Madeira wine. Let it boil again, and then remove it from the fire and let it stand a few minutes. Then remove the curd, pour the whey into a bowl, and sweeten it

RENNET WHEY.

Wash a small bit of rennet, about two inches square, in cold water, to remove the salt. Put it into a teacup, and pour on lukewarm water enough to cover it. Let it stand all night, and in the morning stir rennet-water into a quart of warm milk. Cover it, and set it near the fire, till a firm curd is formed. Pour off the whey, and it will be found a very cooling and palatable drink.

CALVES' FEET JELLY.

Take two calves' feet, and add to them one gallon of water, which reduce by boiling to one quart. Strain, and when cold skim carefully. Add the whites of six or eight eggs well beaten, a pint of wine, half a pound of loaf sugar, and the juice of four lemons, and let them be well mixed. Boil the whole for a few minutes, stirring constantly, and pass it through a flannel strainer. (Wine should be omitted in some cases.)

RICE GRUEL.

Take of ground rice ℥j., cinnamon ʒj., water Oij. Boil for forty minutes, adding the cinnamon near the conclusion. Strain and sweeten, and add wine, if necessary.

BRAN TEA.

Take of fresh wheat bran Oj., water three quarts. Boil down one-third; strain, and add sugar, honey, or molasses, according to the taste of the patient.

LEMONADE.

Take of fresh lemon juice ℥iv., fresh lemon peel ℥ss., white sugar ℥iv., boiling water three pints. Let them stand till cold, and then strain off for use. In fevers, a little spirits of nitre may be added.

TAMARIND WATER.

Put tamarinds into a pitcher or tumbler till it is one-third full; then fill it up with cold water, cover it, and let it infuse for a quarter of an hour or more.

MOLASSES POSSET.

Put into a sauce-pan a pint of best molasses, a teaspoonful of powdered white ginger, and a quarter of a pound of fresh butter. Simmer on hot coals for half an hour, stirring frequently. Then stir in the juice of two lemons, or two tablespoonfuls of vinegar; cover the pan, and let it stand by the fire five minutes longer.

COCOA.

Boil two ounces of good cocoa in a quart of water, and as soon as it boils, set it on coals to simmer gently for an hour or more. To be used hot.

TOAST WATER.

Toast some pieces of bread brown (not burnt), then put them into a pitcher, and fill it up with boiling water. Let it stand til cold, then strain it, and put it into a decanter.

APPENDIX.

NO. IV.

***Comparative View of the Chemical Affinity between the Principal Acids and six of the Alkaline and Earthy Bases; that between Sulphuric Acid and Baryta being taken at* 1000 *as a standard. Compiled fram* Ure's Chemical Dictionary.**

ACIDS	BASES.					
	Baryta.	Lime.	Potassa.	Soda.	Magnesia.	Ammonia.
Sulphuric, . .	1000	868	894	885	810	808
Nitric, ...	849	741	812	804	732	731
Hydrochloric, .	840	736	804	797	728	729
Phosphoric, . .	906	865	801	796	736	628
Oxalic, ...	930	960	650	645	820	611
Tartaric, ...	760	867	616	611	618	609
Arsenious, . .	733	733	614	609	733	609
Citric, ...	730	731	610	605	615	603
Sulphurous, .	592	516	488	484	439	433
Acetic, ...	594	470	486	482	430	432
Boracic, ...	515	537	482	479	459	430
Nitrous, ...	450	425	440	437	410	400
Carbonic, . .	420	423	306	304	366	339
Hydrocyanic, .	400	290	298	280	279	270

Quantities of Opium contained in different Preparations.

Linimentum Opii	**gr. iij. . . . .**	**in fʒiv.**
Pilulæ Saponis comp.	**gr. j. . . . .**	**in gr. v.**
——— Styracis comp.	**gr. j. . . . .**	**in gr. v.**
Pulv. Cretæ comp. c. opio . .	**gr. j. . . . .**	**in ℈ij.**
——— Ipecacuanhæ comp. . .	**gr. j. . . . .**	**in gr. x.**
——— Kino compositus	**gr. j. . . . .**	**in ℈j.**
Tinctura camphoræ comp. . .	**gr. ij. . . . .**	**in f℥j.**
———— Opii	**gr. j. . . . .**	**in ♏xix.**
Vinum Opii.	**gr. j. . . . .**	**in ♏xix.**
Tinctura Iodinii comp. contains	**gr. ij. of Iodine .**	**in fʒj.**
Unguentum Iodinii comp. "	**gr. v. " . . . .**	**in ʒiss.**
Unguentum Hydrarg. Fortius contains	**ʒj. of mercury**	**in ʒij.**
Unguentum Hydrarg. Mitius contains	**ʒj. "**	**in ʒvj.**

TABLE I.

Table of the Alcoholic Strength of Wines. By Christison.

	Pr ct. of abs. alc'h'l by wt.	Pr.ct.of pro'f spirit by vol.
Port, weakest	14.97	30.56
—— mean of seven wines, . .	16.20	33.91
—— strongest, ...	17.10	37.27
White Port, ...	14.97	31.31
Sherry, weakest, ...	13.98	30.80
——— mean of 13 wines, including those very long kept in cask, ...	15.37	33.59
——— strongest, ...	16.17	35.12
——— mean of 9 wines very long kept in cask in the East Indies, ...	14.72	32.30
Madre da Xeres, ...	16.90	37.06
Madeira, strongest } kept long in ck.	14.09	30.80
——— weakest } in East Indies,	16.90	36 81
Teneriffe, long in cask at Calcutta,	13.84	30.21
Cercial, ...	15.45	33.65
Dry Lisbon, ...	16.14	34.71
Shiraz, ...	12.95	28.30
Amontillado, ...	12.63	27.60
Claret, a first growth of 1811, .	7.72	16.95
Chaton Latour, first growth of 1825,	7.78	17.06
Rosan, second growth of 1825, .	7.61	16.74
Ordinary Claret, a superior "vin ordinaire,"	8.99	18.96
Rives Altes, ...	9.31	22.35
Malmsey, ...	12.86	28.37
Rudesheimer, superior quality, .	8.40	18.44
———— inferior " . .	6.90	15.19
Hambacher, superior quality, .	7.35	16.15
Giles's Edinb'rgh ale, before bottl'g	5.90	12.60
The same ale two years in bottle,	6.06	13.40
Superior London Porter, four months bottled, ...	5.36	11.91

The results of the above table were obtained by distillation, which was applied with such contrivances for accuracy, that nearly the whole spirit and water were distilled over without a trace of empyreuma, and without the loss of more than between two and six grains in 2000. From the quantity and density of the spirit, the *weight* of absolute alcohol of the density 793.9, as well as the *volume* of proof spirit of the density 920, was calculated from the tables of Richter, founded on those of Gilpin. Dr. Christison remarks that the alcoholic strength of various samples of the same kind of wine bears no relation whatever to their commercial value, and is often very different from what would be indicated by the ta[illegible]perienced wine-taster.

TABLE II.

Table of the Alcoholic Strength of Wines.* By Brande.

	Pr. ct. by measure of absol. alcoh'l.†		Pr. ct. by measure of absol. alcoh'l.†
Lissa, (average) .	25.41	Lunel, ...	15.52
Port, (aver.) . . .	22.18	Shiraz, ...	15.52
Raisin wine, (aver.)	25.12	Syracuse, ...	15.28
Marsala, (aver.) .	29.09	Sauterne, ...	14.22
Madeira, aver.) .	22.27	Burgundy, (aver.) .	14.57
Currant wine, . .	20.55	Hock, (aver.) . .	13.68
Sherry, (aver.) . .	19.17	Hock, old in cask, .	8.88
Teneriffe, ...	19.79	Nice, ...	14.63
Calares, ...	19.75	Barsac, ...	13.86
Lachryma Christi,	19.70	Tent, ...	13.30
White Constantia,	19.75	Champagne, white,	13.30
Red Constantia, .	18.92	Champagne, red, .	11.93
Lisbon, ...	18.94	Red hermitage, . .	12.32
Malaga, (1666) . .	18 94	Vin de grave, (aver.)	12.37
Bucellas, ...	18.49	Frontignac, . . .	12.79
Red Madeira, (aver.)	20.35	Cote Rotie, . . .	12.32
Cape Muscat, . .	18.25	Gooseberry wine, .	11.84
Cape Madeira, (aver.)	20.51	Tokay, ...	9.88
Grape wine, . . .	18.11	Elder wine, . . .	9.87
Calcavella, (aver.)	18.65	Orange wine, (aver.)	11.26
Vidonia, ...	19.25	Cider, (highest aver.)	9.87
Alba flora, . . .	17.26	Cider, (lowest aver.)	5.21
Malaga, . . .	17.26	Perry, (aver.) . .	7.26
White Hermitage,	17.43	Mead, ...	7.32
Rousillon, (aver.) .	18.13	Burton ale, . . .	8.88
Claret, (aver.) . .	15.10	Brown stout, . .	6.30
Malmsey Madeira,	16.40	London porter, . .	4.20
London small beer,	1.28		

* Somewhat different results have been obtained from some wines by other chemists. Thus the average of Lissa has been found to be 15.90; Marsala, 18.40; Port, 20.64; Madeira, 21.20; Sherry, 23.80; Constantia, 14.50; Lunel, 18.01; Syracuse, 30.00; Burgundy, 12.16; Champagne, 12.20.

† Sp. grav. 0.825 at 60° F.

Mr. Brande has shown that alcohol exists, ready formed, in wine. It is consequently always the *product* of fermentation; the *educt* of distillation. Its effects upon the system, however, are greatly modified by the acids, extractive, and other matters, contained in wines; they being found far more deleterious than the same quantity of pure alcohol diluted with pure water. For example, although wine-drinking is often the cause of gout, yet it has never been known to result from the use of brandy, gin, rum, or whiskey.

TABLE III.

Table of the Relative Proportions of Alcohol and other Matters* in Wines. By Neumann.

A QUART OF	Amount of alcohol (absol.) by measure.		Thick, oily, unctuous, resinous matter.			Gummy and* tartarcous matter.			Water.			
	℥	ʒ	℥	ʒ	grs.	℥	ʒ	grs.	lb	℥	ʒ	grs.
Alund, . . .	1	6	3	2		1	5		2	5	3	
Alicant, . .	3	6	6		20		1	40	2	2	6	
Burgundy, .	2	2		4			1	40	2	9		20
Carcassone,	2	6		4	10		1	20	2	8	4	30
Champagne, .	2	5		6	40		1		2	8	3	
French, . .	3			6	40		1		2	8		20
Frontignac, .	3		3	4			5	20	2	4	6	20
Vin de Grave,	2			6			2		2	9		
Hermitage, .	2	7	1	2			1	40	2	7	5	20
Madeira, . .	2	3	3	2		2			2	4	3	
Malmsey, . .	4		4	3		2	3		2	1	2	
Vino de Monte,	2	6		3			2	40	2	8		20
Moselle, . .	2	2		4	20		1	30	2	9		10
Muscadine, .	3		2	4		1			2	5	4	
Neufchatel, .	3	2	4			1	7		2	2	7	
Palmsee, . .	2	3	2	4		4	4		2	2	5	
Pontac, . .	2			5	20		2		2	9		40
Old Rhenish	2		1				2	20	2	8	5	40
Rhenish, . .	2	2		3	20		1	34	2	9	1	60
Salamanca, .	3		3	4		2			2	3	4	
Sherry, . .	3		6			2	2		2		6	
Spanish, . .	1	2	2	4		9	4		1	10	6	
Vino Tinto, .	3		6	4		1	6		2		6	
Tokay, . . .	2	2	4	3		5			2		3	
Tyral (red), .	1	4	1	2			4		2	8	6	
Red wine, .	1	6		4	40		2	20	2	9	3	20
White, . . .	2	0		7			3		2	7		

* According to Gmelin, wines contain alcohol, an odorous principle (vol. oil ?), tannin, bitter extractive, sugar, gum, yeast acetic acid, malic acid, tartaric acid, bitartrate of potash, bitartrate of lime, sulphates and chlorides, phosphate of lime, carbonic acid, water, and blue coloring matter.

The *acidity* of wines is owing chiefly to *malic*, in part to *citric* and *tartaric* acids. The quantity of *sugar* varies greatly in different wines. *Extractive* exists in all wines, but diminishes, by deposition, with their age. All wines contain more or less *coloring matter*. *Tartar* is the most important saline constituent of wines

TABLE,

Showing the Difference between Minims, Drops and Grains of various Medicinal Liquid Preparations of the Pharmacopœia of the United States, &c. (From Edwards's and Vavasseur's "Manual of Materia Medica," ed. by Drs. Togno and Durand.)

	No. of drops in 20 minims.	No. of minims in 20 drops.	No. of drops in 20 grains.	No. of grains in 20 drops.
Sulphuric acid,	30.	13.3	25.	'6
Sulphuric æther,	50.	8.	60.	6.
Rectified alcohol,	46.	8.6	57.	7.1
Nitric acid,	28.	14.2	22.2	18.
Acetic acid (crystallizable),	40.	10.	40.	40.
Muriatic acid,	18.	22.2	18.1	22.
Oil of wormseed (*Chenop. Anthel.*)	40.	10.	50.	8.
—— peppermint, of aniseed,	40.	10.	43.5	9.
—— sweet almond, olive, palma christi,				
—— cloves,	40.	10.	36.	11.
—— cinnamon,	40.	10.	32.	12.5
Copaiba,	40.	10.	40.	10.
Diluted alcohol,	40.	10.	42.	9.5
Tincture of hydriodate of potassa, cantharides, kino, digitalis, assafœtida, sulphuric acid, colchicum, opium, valerian, guaiacum,	40.	10.	43.	9.3
Tincture (volatile) of valerian, of guaiacum,	40.	10.	50.	8.
Tincture of muriate of iron,	44.	9.1	50.	8.
Wine (Teneriffe),	26.	15.3	25.	16.
—— (antimonial),	24.	16.6	26.	15.3
—— of opium, (Sydenh. laudan)	26.	15.3	29.	13.7
—— of colchicum root,	25.	16.	29.	13.7
—— of colchicum seeds,				
Vinegar (distilled),	19.	21.	20.	20.
—— of opium (black drop),	26.	15.3	25.	16.
—— of colchicum,				
—— of squill,				
Water (distilled)	15.	26.6	17.5	24.5
—— solution of hydrocy. acid,*	15.	26.6	17.5	24.5
—— solution of sulphuric acid (1 to 7),	17.	23.5	17.	23.5
—— solution of nitric acid, do.	17.	23.5	17.	23.5
—— solution of ammonia (stro'g)	18.	22.2	18.5	22.
—— solution of " (weak)	15.	26.6	20.	20.
—— solution of hydriod. of pot.,	18.	22.2	20.	20.
—— solution of arsenite of pot.,	19.	21.	20.	20.

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* Prepared according to the process of the London Apothecaries' Hall.

APPENDIX.

NO. V.

WEIGHTS AND MEASURES

WEIGHTS.

The pound,	℔	contains	Twelve ounces.
ounce,	℥		Eight drachms.
drachm,	ʒ		Three scruples.
scruple,	℈		Twenty grains.
grain,	gr.		————

These, and the signs by which they are denoted, are the same in all the British Pharmacopœias.

APOTHECARIES' WEIGHT.

Pound.		Ounces.		Drachms.		Scruples.		Grains
1	=	12	=	96	=	288	=	5760
		1	=	8	=	24	=	480
				1	=	3	=	60
						1	=	20

MEASURE OF FLUIDS.

The gallon, *Cong.*		contains	Eight pints.
pint, (*Octarius*)	O		Twenty fluid ounces.
fluid ounce,	f℥		Eight fluid drachms.
fluid drachm,	fʒ		Sixty minims.
minim,	♏		————

PROPORTION OF THE IMPERIAL GALLON.

Gallons.		Pints.		Fluid Ounces.		Fluid Drachms.		Minims
1	=	8	=	160	=	1280	=	76,800
		1	=	20	=	160	=	9,600
				1	=	8	=	480
						1	=	60

The above is the fluid measure, and the signs by which they are denoted in the London and the Edinburgh Pharmacopœias. The Dublin College retains the old signs, which are, for the gallon *cong.*, the pint *lb.*, the ounce ℥, the drachm ʒ, and the drop *gt.*, which should be equal to the minim.

The MEASURE OF TEMPERATURE used by all the Colleges is Fahrenheit's thermometer. 212° on the scale of which marks the boiling point of water, and 32° the freezing point: between 90° and 100° denote the gentle heat (*calor lenis*) of the Pharmacopœias.

TEMPERATURE OF BATHS.

The hot bath (*balneum fervidum*)	from	98°	to	106°
The warm bath (*balneum calidum*)	from	96°	to	98°
The tepid bath (*balneum tepidum*)	from	62°	to	96°
The vapor bath (*balneum vaporis*)	from	100°	to	130°

For ascertaining the densities of fluids, the Edinburgh College recommends the hydrometer of Twaddell, or Levi's density beads. The temperature of the fluids tested should be 60° Fahrenheit.

Table of the more celebrated Mineral Waters, showing the Ingredients contained in each Water.

	NAMES OF THE SPRINGS.	Quantity of water.	GASES.				CARBONATES OF				SULPHATES OF				CHLORIDES OF				Silica.	Ammonia.	Resin.	Temperature.
			Oxygen.	Carb Acid.	Sulph. Hydr.	Nitrogen.	Soda.	Lime.	Magnesia.	Iron.	Soda.	Lime.	Magnesia.	Iron.	Soda.	Lime.	Magnesia.	Potash.				
		grs.	cub. in.	cubic in.	cubic in.	cub. in.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	
Acidulous.	Seltzir	8949	.435	13.068	..	..	5.22	78.3	6.32	..	..	..	..	..	13.74	..	..	..	..	..	..	cold
	Pyrmont	8950	..	19.6	..	..	..	4.3	9.8	0.70	..	8.38	5.44	..	1.7	..	..	..	..	..	..	cold
	Spa	8933	..	9.8	..	..	1.85	1.85	4.35	0.70	..	..	..	..	0.21	..	..	..	..	..	..	cold
	Carlsbad	25320	..	50.	..	..	38.5	12.5	..	0.1¼	66.75	..	..	..	22.5	..	..	..	2.25	..	..	165°
	Kilburn	138240	..	84.	26.	..	..	2.4	1.25	0.3	18.2	13.0	91.0	..	6.0	0.6	2.8	..	..	..	6.	cold
	Ponges	7291	..	30.	.	.	10.	12.	1.2	2.5	..	..	..	..	2.5	..	..	..	0.5	..	..	cold
	St. Parize	7291	..	22.	..	.	..	11.5	0.5	..	..	13.	..	..	..	..	..	..	..	..	..	cold
	Ems	7291	..	51.	..	..	10.75	1.14	0.8	0.026	6.	..	..	..	7.634	..	..	0.04	60.4	..	..	117°
	Marienbad	7291	..	125	..	.	8.26	4.13	3.05	0.176	29.72	..	..	..	12.45	..	..	..	0.88	0.75	..	cold
	Anschowitz	7291	..	149.56	..	.	6.197	4.016	2.4	0.4	22.54	4.	..	..	8.996	..	..	..	0.66	9.	..	cold
	Eger	7291	..	154.	..	.	5.00	..	0.600	0.350	25.50	..	..	..	7.96	..	..	..	0.55	8.	..	cold
	Geilnau	7291	..	163.3	..	..	6.62	2.97	2.170	..	0.042	..	..	..	0.543	..	..	..	0.26	0.34	..	cold
Sulphureous.	Harrowgate	103643	..	8.	19.	7.	..	18.5	5.5	..	..	..	0.5	..	615.5	3.	9.1	..	..	..	..	cold
	Moffat	103643	..	1.	10.	4.	..	..	..	..	..	..	..	..	3.6	..	..	..	..	..	..	cold
	Aix-la-Chapelle	8040	..	.	13.06	..	..	15.25	5.89	..	..	..	..	..	6.21	..	..	..	..	.	.	143°
	Enghien	92160	..	18.5	70.	..	.	21.4	1.35	..	..	33.3	5.8	..	2.4	..	8.0	..	..	.	.	cold
	Cheltenham Sulphur Spring.	7291	..	..	1.5	..	..	..	..	0.3	23.5	1.2	5.	..	35.	..	..	..	..	.		cold
	Red Sulph., Va.	50000						4.50	4.13		3.55	.47	7.20						C.70			

Table of the more celebrated Mineral Waters, showing the Ingredients contained in each Water—continued

	NAMES OF THE SPRINGS.	Quantity of water.	GASES.				CARBONATES OF				SULPHATES OF				CHLORIDES OF				Silica.	Ammonia.	Resin.	Temperature.
			Oxygen.	Carb. Acid.	Sulph. Hydr.	Nitrogen.	Soda.	Lime.	Magnesia.	Iron.	Soda.	Lime.	Magnesia.	Iron.	Soda.	Lime.	Magnesia.	Potash.				
		grs.	cub. in.	cubic in.	cub. in.	cub. in.	grs	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	
Saline.	Seidlitz	58309	..	8.	..	..	..	6.7	21.	..	..	41.1	14.44	..	..	..	36.5	..	..	..	..	cold
	Cheltenham	103642	..	30.3	1.	2.	..	..	12.5	5.	48.	40.	..	..	5.	..	12.5	..	..	..	..	cold
	Plombieres	..	..	..	..	..	4.4	1.	..	..	4.7	..	..	..	0.5	..	..	..	2.6	..	..	cold
	Leamington	5760	..	..	..	..	..	..	..	..	7.83	..	..	..	53.75	28.64	20.16	..	..	..	..	cold
	Bristol	7291	..	3.5	..	..	..	1.5	..	..	..	1.5	1.5	..	0.5	..	1.	..	..	..	..	74°
	Scarborough	7291	..	..	..	..	..	..	..	..	..	20.	9.	..	..	..	..	..	..	..	..	cold
	Barege	7291	..	..	..	..	2.5	..	..	..	..	..	..	..	0.5	..	..	..	..	..	..	120°
Chalybeate.	Tunbridge	103643	1.4	10.6	..	4.	..	..	..	1.	..	1.25	..	..	0.5	..	2.25	..	..	..	..	cold
	Toplitz	22516	..	..	..	..	13.5	16.5	..	32.5	..	..	..	..	61.3	28.5	..	..	..	15.1	..	cold
	Brighton	7291	..	2.2	..	..	..	..	..	1.4	..	4.	..	..	3.	..	0.75	0.14	..	..	..	cold
	Iodine Sp'g, Saratoga	58309	..	336.	..	..	2.	26.	75.	1.	..	..	..	..	187.	..	..	..	..	..	..	
	Schooley's Mountain	58309	..	..	..	..	..	7.99	0.40	2.00	..	0.65	..	..	0.43	2.40	.50	..	0.80	..	..	
Calcareous, nearly pure.	Bath	15360	..	2.4	..	..	..	1.6	..	.004	3.	18.	..	..	6.6	..	..	..	0.4	..	..	114°
	Buxton	58309	..	..	..	2.	..	10.5	..	..	..	2.5	..	..	1.5	..	..	..	..	..	..	82°
	Matlock	58309	..	..	..	.	..	..	..	..	..	min. por.	..	..	..	..	..	..	..	..	..	96°
	Malvern	58309	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	cold

TABLE OF CHANGES IN THE LATIN NOMENCLATURE.

I.

ALPHABETICAL LIST OF NEW LATIN NAMES, WITH THE CORRESPONDING OLD NAMES. (U. S. P.)

NEW NAMES.	OLD NAMES.
Acacia,	Acaciæ Gummi.
Æther Sulphuricus,	Æther Sulphuricus Rectificatus
Amygdala Dulcis,	Amygdala.
Barii Chloridum,	Barytæ Murias.
Cetraria,	Lichen.
Conii Folia,	Conium.
Creta,	Calcis Carbonas.
Creta Præparata,	Calcis Carbonas Præparatus.
Cupri Subacetas,	Cupri Acetas.
Decoctum Cetrariæ,	Decoctum Lichenis.
Ergota,	Secale Cornutum.
Eupatoreum,	Eupatorium Perfoliatum.
Extractum Hellebori,	Extractum Hellebori Nigri.
Extractum Stramonii Foliorum,	Extractum Stramonii.
Ferri Ferrocyanuretum,	Ferri Ferrocyanas.
Ferri Subcarbonas,	Ferri Carbonas Præcipitatus.
Granati Fructi Cortex,	Granatum.
Guaiaci Resina,	Guaiacum.
Helleborus,	Helleborus Niger.
Hydrargyrum cum Creta,	Hydrargyrum cum Calcis Carbonate.
Hyoscyami Folia,	Hyoscyamus.
Infusum Eupatorii,	Infusum Eupatorii Perfoliati.
Liquor Ammoniæ,	Aqua Ammoniæ.
Liquor Barii Chloridi,	Liquor Barytæ Muriatis.
Liquor Calcii Chloridi,	Liquor Calcis Muriatis.
Marmor,	Calcis Carbonas Durus.
Mistura Cretæ,	Mistura Calcis Carbonatis.
Mucuna,	Dolichos.
Potassæ Bitartras,	Potassæ Supertartras.
Potassæ Carbonas Purus,	Potassæ Carbonas [illegible]
Potassii Sulphuretum,	Potassæ Sulphuretum
Scoparius,	Scoparium.
Spiritus Ammoniæ,	Alcohol Ammoniatum.
Spiritus Ammoniæ Aromaticus,	Alcohol Ammoniatum Aromaticum
Sulphur Lotum,	Sulphur.
Syrupus Sarsaparillæ Compositus,	Syrupus Sarsaparillæ.
Syrupus Scillæ Compositus.	Mel Scillæ Compositum.
Tinctura Ferri Chloridi.	Tinctura Ferri Mu[illegible]
Tinctura Gentianæ Composita.	Tinctura Gentianæ
Tinctura Hellebori.	Tinctura Helle[illegible]
Trochisci Cretæ.	Trochisci Calc[illegible]
Unguentum Cupri Subacetatis	Unguentum C[illegible]

II.

ALPHABETICAL LIST OF OLD NAMES, WITH THE CORRESPONDING NEW NAMES. (U. S. P.)

OLD NAMES.	NEW NAMES.
Acaciæ Gummi,	Acacia.
Æther Sulphuricus Rectificatus,	Æther Sulphuricus.
Alcohol Ammoniatum,	Spiritus Ammoniæ.
Alcohol Ammoniatum Aromaticum,	Spiritus Ammoniæ Aromaticus.
Amygdala,	Amygdala Dulcis.
Aqua Ammoniæ,	Liquor Ammoniæ.
Barytæ Murias,	Barii Chloridum.
Calcis Carbonas,	Creta.
Calcis Carbonas Durus,	Marmor.
Calcis Carbonas Præparatus,	Creta Præparata.
Conium,	Conii Folia.
Cupri Acetas,	Cupri Subacetas.
Decoctum Lichenis,	Decoctum Cetrariæ.
Dolichos,	Mucuna.
Eupatorium Perfoliatum,	Eupatorium.
Extractum Hellebori Nigri,	Extractum Hellebori.
Extractum Stramonii,	Extractum Stramonii Foliorum.
Ferri Carbonas Præcipitatus,	Ferri Subcarbonas.
Granatum,	Granati Fructus Cortex.
Guaiacum,	Guaiaci Resina.
Helleborus Niger,	Helleborus.
Hydrargyrum cum Calcis Carbonate,	Hydrargyrum cum Creta.
Hyoscyamus,	Hyoscyami Folia.
Infusum Eupatorii Perfoliati,	Infusum Eupatorii.
Lichen,	Cetraria.
Liquor Barytæ Muriatis,	Liquor Barii Chloridi.
Liquor Calcis Muriatis,	Liquor Calcii Chloridi.
Mel Scillæ Compositum,	Syrupus Scillæ Compositus.
Mistura Calcis Carbonatis,	Mistura Cretæ.
Potassæ Carbonas Purissimus,	Potassæ Carbonas Purus.
Potassæ Sulphuretum,	Potassii Sulphuretum.
Potassæ Supertartras,	Potassæ Bitartras.
Secale Cornutum,	Ergota.
Sulphur,	Sulphur Lotum.
Syrupus Sarsaparillæ,	Syrupus Sarsaparillæ Compositus.
Tinctura Ferri Muriatis,	Tinctura Ferri Chloridi.
Tinctura Gentianæ,	Tinctura Gentianæ Composita.
Tinctura Hellebori Nigri,	Tinctura Hellebori.
Trochisci Calcis Carbonatis,	Trochisci Cretæ.
Unguentum Cupri Acetatis,	Unguentum Cupri Subacetatis.

TABLE OF CHANGES IN THE ENGLISH NOMENCLATURE.

III.

ALPHABETICAL LIST OF NEW NAMES, WITH THE CORRESPONDING OLD NAMES. (U. S. P.),

NEW NAMES.	OLD NAMES.
Aromatic Spirit of Ammonia,	Aromatic Ammoniated Alcohol
Balsam of Tolu,	Tolu.
Belladonna,	Deadly Nightshade.
Bitartrate of Potassa,	Supertartrate of Potassa.
Canada Pitch,	Hemlock Pitch.
Canada Turpentine,	Canada Balsam.
Chalk,	Carbonate of Lime.
Chalk Mixture,	Mixture of Carbonate of Lime.
Colchicum Root,	Meadow-saffron Root.
Colchicum Seed,	Meadow-saffron Seed.
Compound Syrup of Sarsaparilla,	Syrup of Sarsaparilla.
Compound Syrup of Squill,	Compound Honey of Squill.
Compound Tincture of Gentian,	Tincture of Gentian.
Ergot,	Spurred Rye.
Extract of Belladonna,	Extract of Deadly Nightshade.
Extract of Stramonium Leaves,	Extract of Thorn-apple.
Ferro-cyanuret of Iron,	Ferrocyanate of Iron.
Hemlock Leaves,	Hemlock.
Henbane Leaves,	Henbane.
Lobelia,	Indian Tobacco.
Marble,	Hard Carbonate of Lime.
Mercury with Chalk,	Mercury with Carbonate of Lime.
Ointment of Stramonium,	Ointment of Thorn-apple.
Ointment of Subacetate of Copper,	Ointment of Acetate of Copper
Pomegranate Rind,	Pomegranate.
Prepared Chalk,	Prepared Carbonate of Lime.
Pure Carbonate of Potassa,	Purest Carbonate of Potassa.
Solution of Ammonia,	Water of Ammonia.
Solution of Chloride of Barium,	Solution of Muriate of Baryta.
Solution of Chloride of Calcium,	Solution of Muriate of Lime.
Spirit of Ammonia,	Ammoniated Alcohol.
Stramonium Leaves,	Thorn-apple Leaves.
Stramonium Seed,	Thorn-apple Seed.
Subacetate of Copper,	Acetate of Copper.
Subcarbonate of Iron,	Precipitated Carbonate of Iron.
Sulphuret of Potassium,	Sulphuret of Potassa.
Sulphuric Ether,	Rectified Sulphuric Ether.
Sweet Almonds,	Almonds.
Syrup of Lemons,	Lemon Syrup.
Tincture of Chloride of Iron,	Tincture of Muriate of Iron.
Tincture of Lobelia,	Tincture of Indian Tobacco.
Tincture of Stramonium,	Tincture of Thorn-apple.

NEW NAMES.	OLD NAMES.
Troches of Chalk,	Troches of Carbonate of Lime
Vinegar of Colchicum,	Vinegar of Meadow-saffron.
Washed Sulphur,	Sulphur.
Wine of Colchicum Root,	Wine of Meadow-saffron Root.
Wine of Colchicum Seed,	Wine of Meadow-saffron Seed.

IV.

ALPHABETICAL LIST OF OLD NAMES, WITH THE CORRESPONDING NEW NAMES. (U. S. P.)

OLD NAMES.	NEW NAMES.
Acetate of Copper,	Subacetate of Copper.
Almonds,	Sweet Almonds.
Ammoniated Alcohol,	Spirit of Ammonia.
Aromatic Ammoniated Alcohol,	Aromatic Spirit of Ammonia.
Canada Balsam,	Canada Turpentine.
Carbonate of Lime,	Chalk.
Compound Honey of Squill,	Compound Syrup of Squill.
Deadly Nightshade,	Belladonna.
Extract of Deadly Nightshade,	Extract of Belladonna.
Extract of Thorn-apple,	Extract of Stramonium Leaves
Ferrocyanate of Iron,	Ferro-cyanuret of Iron.
Hard Carbonate of Lime,	Marble.
Hemlock,	Hemlock Leaves.
Hemlock Pitch,	Canada Pitch.
Henbane,	Henbane Leaves.
Indian Tobacco,	Lobelia.
Lemon Syrup,	Syrup of Lemons.
Meadow-saffron Root,	Colchicum Root.
Meadow-saffron Seed,	Colchicum Seed.
Mercury with Carbonate of Lime,	Mercury with Chalk.
Mixture of Carbonate of Lime,	Chalk Mixture.
Muriate of Baryta,	Chloride of Barium.
Ointment of Acetate of Copper,	Ointment of Subacetate of Copper.
Ointment of Thorn-apple,	Ointment of Stramonium.
Pomegranate,	Pomegranate Rind.
Precipitated Carbonate of Iron,	Subcarbonate of Iron.
Prepared Carbonate of Lime,	Prepared Chalk.
Purest Carbonate of Potassa,	Pure Carbonate of Potassa.
Rectified Sulphuric Ether,	Sulphuric Ether.
Solution of Muriate of Baryta,	Solution of Chloride of Barium.
Solution of Muriate of Lime,	Solution of Chloride of Calcium.
Spurred Rye,	Ergot.
Sulphur,	Washed Sulphur.
Sulphuret of Potassa,	Sulphuret of Potassium.
Supertartrate of Potassa,	Bitartrate of Potassa.
Syrup of Sarsaparilla,	Compound Syrup of Sarsaparilla.
Thorn-apple Leaves,	Stramonium Leaves.

OLD NAMES.	NEW NAMES.
Thorn-apple Seed,	Stramonium Seed.
Tincture of Gentian,	Compound Tincture of Gentian.
Tincture of Indian Tobacco,	Tincture of Lobelia.
Tincture of Muriate of Iron,	Tincture of Chloride of Iron.
Tincture of Thorn-apple,	Tincture Stramonium.
Tolu,	Balsam of Tolu.
Troches of Carbonate of Lime,	Troches of Chalk.
Vinegar of Meadow-saffron,	Vinegar of Colchicum.
Water of Ammonia,	Solution of Ammonia.
Wine of Meadow-saffron Root,	Wine of Colchicum Root.
Wine of Meadow-saffron Seed,	Wine of Colchicum Seed.

V.

TABLE OF MEDICINES INTRODUCED INTO THE U. STATES PHARMACOPEIA AND DISMISSED.

Substances introduced into the Materia Medica, and contained in the last edition of the U. S. Pharmacopeia.

Absinthium,	Wormwood.
Althæa,	Marsh Mallow.
Amygdala Amara,	Bitter Almonds.
Amylum,	Starch.
Brominium,	Bromine.
Calx Chlorinata,	Chlorinated Lime.
Cataria,	Catnep.
Chondrus,	Irish Moss.
Coccus,	Cochineal.
Conii Semen,	Hemlock Seed.
Creosotum,	Creosote.
Diosma,	Buchu.
Granati Radicis Cortex,	Bark of Pomegranate Root.
Hyoscyami Semen,	Henbane Seed.
Limonis Cortex,	Lemon Peel.
Liquor Ammoniæ Fortior,	Stronger Solution of Ammonia.
Matricaria,	German Chamomile.
Melissa,	Balm.
Oleum Bergamii,	Oil of Bergamot.
Oleum Cubebae,	Oil of Cubebs.
Oleum Rosæ,	Oil of Roses.
Panax,	Ginseng.
Papaver,	Poppy Heads.
Pareira,	Pareira Brava.
Plumbi Oxidum Rubrum,	Red Oxide of Lead.
Potassii Ferrocyanuretum,	Ferrocyanuret of Potassium.
Pyrethrum,	Pellitory.
Ruta,	Rue.
Sabadilla,	Cevadilla.
Salvia,	Sage.
Sambucus,	Elder Flowers.
Stramonii Radix,	Stramonium Root.

VI.

PREPARATIONS INTRODUCED. (U. S. P.)

Acetum Opii,	Acetate of Opium.
Acidum Muriaticum Dilutum,	Diluted Muriatic Acid.
Acidum Nitricum Dilutum,	Diluted Nitric Acid.
Acidum Nitromuriaticum,	Nitro-muriatic Acid.
Acidum Tannicum,	Tannic Acid.
Aqua Fœniculi,	Fennel Water.
Argenti Cyanuretum,	Cyanuret of Silver.
Carbo Animalis Purificatus,	Purified Animal Charcoal.
Cassiæ Fistulæ Pulpa,	Pulp of Purging Cassia.
Decoctum Chimaphilæ,	Decoction of Pipsisewa.
Decoctum Quercus Albæ,	Decoction of White Oak Bark.
Decoctum Taraxaci,	Decoction of Dandelion.
Emplastrum Belladonnæ,	Plaster of Belladonna.
Emplastrum Opii,	Opium Plaster.
Emplastrum Saponis,	Soap Plaster.
Extractum Aconiti Alcoholicum,	Alcoholic Extract of Aconite.
Extractum Belladonnæ Alcoholicum,	Alcoholic Extract of Belladonna.
Extractum Conii Alcoholicum,	Alcoholic Extract of Hemlock.
Extractum Dulcamaræ Alcoholicum,	Extract of Bitter-sweet.
Extractum Hyoscyami,	Alcoholic Extract of Henbane.
Extractum Krameriæ,	Extract of Rhatany.
Extractum Nucis Vomicæ,	Extract of Nux Vomica.
Extractum Sarsaparillæ,	Extract of Sarsaparilla.
Extractum Stramonii Seminis,	Extract of Stramonium Seed.
Ferri Iodidum,	Iodide of Iron.
Ferri Oxidum Hydratum,	Hydrated Oxide of Iron.
Hydrargyri Iodidum,	Iodide of Mercury.
Hydrargyri Iodidum Rubrum,	Red Iodide of Mercury.
Infusum Caryophylli,	Infusion of Cloves.
Infusum Catechu Compositum,	Compound Infusion of Catechu.
Infusum Cinchonæ Compositum,	Compound Infusion of Peruvian Bark.
Infusum Diosmæ,	Infusion of Buchu.
Infusum Humuli,	Infusion of Hops.
Infusum Krameriæ,	Infusion of Rhatany.
Infusum Sarsaparillæ,	Infusion of Sarsaparilla.
Liquor Ferri Iodidi,	Solution of Iodide of Iron.
Liquor Iodinii Compositus,	Compound Solution of Iodine.
Liquor Potassæ Citratis,	Solution of Citrate of Potassa.
Liquor Sodæ Chlorinatæ,	Solution of Chlorinated Soda.
Mel Præparatum,	Prepared Honey.
Mel Rosæ,	Honey of Roses.
Morphiæ Murias,	Muriate of Morphia.
Mucilago Tragacanthæ,	Mucilage of Tragacanth.
Oleum Sabinæ,	Oil of Savine.
Pilulæ Ferri Carbonatis,	Pills of Carbonate of Iron.
Pilulæ Galbani Compositæ,	Compound Pills of Galbanum.
Pilulæ Rhei,	Pills of Rhubarb.

Pilulæ Saponis Compositæ,	Compound Pills of Soap.
Pilulæ Scillæ Compositæ,	Compound Pills of Squill.
Potassii Cyanuretum,	Cyanuret of Potassium.
Pruni Pulpa,	Pulp of Prunes.
Pulvis Jalapæ Compositus,	Compound Powder of Jalap
Strychnia,	Strychnia.
Sulphuris Iodidum,	Iodide of Sulphur.
Syrupus Amygdalæ,	Syrup of Almonds.
Syrupus Ipecacuanhæ,	Syrup of Ipecacuanha.
Syrupus Krameriæ,	Syrup of Rhatany.
Syrupus Sennæ,	Syrup of Senna.
Syrupus Tolutani,	Syrup of Tolu.
Tamarindi Pulpa,	Pulp of Tamarinds.
Tinctura Aconiti,	Tincture of Aconite.
Tinctura Belladonnæ,	Tincture of Belladonna.
Tinctura Colchici Seminis,	Tincture of Colchicum Seed.
Tinctura Conii,	Tincture of Hemlock.
Tinctura Cubebæ,	Tincture of Cubebs.
Tinctura Gallæ,	Tincture of Galls.
Tinctura Iodini Composita,	Compound Tincture of Iodine.
Tinctura Krameriæ,	Tincture of Rhatany.
Tinctura Olei Menthæ Piperitæ,	Tincture of Oil of Peppermint.
Tinctura Olei Menthæ Viridis,	Tincture of Oil of Spearmint.
Trochisci Ipecacuanhæ,	Troches of Ipecacuanha.
Trochisci Menthæ Piperitæ,	Troches of Peppermint.
Unguentum Antimonii,	Antimonial Ointment.
Unguentum Creosoti,	Ointment of Creosote.
Unguentum Iodini,	Ointment of Iodine.
Unguentum Iodini Compositum,	Compound Ointment of Iodine.
Unguentum Mezerei,	Ointment of Mezereon.
Veratria,	Veratria.
Vinum Ergotæ,	Wine of Ergot.
Zinci Chloridum,	Chloride of Zinc.

VII.

SUBSTANCES DISMISSED FROM THE MATERIA MEDICA. (U. S. P.)

Acidum Aceticum Empyreumaticum,	Pyroligneous Acid.
Eupatorium Purpureum,	Gravel Root.
Eupatorium Teucrifolium,	Wild Horehound.
Helleborus Fœtidus,	Bear's-foot.
Menyanthes,	Buckbean.
Sambucus,	Elder Berries.
Veronica,	Veronica.

PREPARATIONS DISMISSED. (U. S. P.)

Antimonii Sulphuretum Præparatum,	Prepared Sulphuret of Antimony.
Aqua Aurantii Corticis,	Water of Orange Peel.
Ceratum Arsenici,	Cerate of Arsenic.

Ceratum Plumbi Carbonatis,	Cerate of Carbonate of Lead.
Confectio Amygdalæ,	Almond Confection.
Confectio Scammonii,	Confection of Scammony.
Cupri Acetas Præparatus,	Prepared Acetate of Copper.
Decoctum Sarsaparillæ,	Decoction of Sarsaparilla.
Decoctum Veratri Albi,	Decoction of White Hellebore.
Emplastrum Plumbi Carbonatis,	Plaster of Carbonate of Lead.
Extractum Anthemidis,	Extract of Chamomile.
Ferri Carbonas Præparatus,	Prepared Carbonate of Iron.
Ferri Oxidum Rubrum,	Red Oxide of Iron.
Ferri Sulphuretum,	Sulphuret of Iron.
Hydrargyrum Purificatum,	Purified Mercury.
Liquor Ammoniæ Hydrosulphatis,	Solution of Hydrosulphate of Ammonia.
Pilulæ Quiniæ Sulphatis Impuri,	Pills of Impure Sulphate of Quinia.
Sodæ Sulphuretum,	Sulphuret of Soda.
Syrupus Acaciæ,	Syrup of Gum Arabic.
Syrupus Aceti,	Syrup of Vinegar.
Syrupus Colchici,	Syrup of Meadow-saffron.
Syrupus Rhei et Sennæ,	Syrup of Rhubarb and Senna.
Tinctura Angusturæ,	Tincture of Angustura Bark.
Tinctura Moschi,	Tincture of Musk.
Unguentum Veratri Viridis,	Ointment of American Hellebore.
Vinum Gentianæ Compositum,	Compound Wine of Gentian.

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